DOCUMENT RESUME

ED 158 638 HE 010 305

AUTHOR	Barak, Robert J.; Berdahl, Robert O.
TITLE	State-Level Academic Program Review in Higher Education. Report No. 107.
INSTITUTION	Education Commission of the States, Denver, Colo.
SPONS AGENCY	Kellogg Foundation, Battle Creek, Mich.
PUB DATE	Feb 78
NOTE	141p.; Part of the Inservice Education Program
AVAILABLE FROM	Education Commission of the States, 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80295 ($5.00)
EDRS PRICE	MF-$0.83 HC-$7.35 Plus Postage.
DESCRIPTORS	*Academic Standards; *Accountability; Educational Assessment; Educational Objectives; Evaluation Criteria; Higher Education; Interinstitutional Cooperation; Needs Assessment; *Program Evaluation; *Review (Reexamination); State Departments of Education; *State Standards

ABSTRACT

The state of the art of state-level academic program review is presented. The growth of state agency reviews and three types of state coordinating agencies are discussed. The relation of program review to budget review and planning is outlined, and a description is provided of what programs are reviewed, the criteria for reviewing new programs, and the process or mechanism of review. A profile by state is presented of the following seven major factors commonly included for new program review: program description, purposes and objectives, need analysis, cost analysis, resources analysis, program accreditation, and availability of adequate student financial aid. Procedures of the various review processes are discussed, and academic reviews conducted in New York and Florida are described. Difficulties encountered in the selection of existing programs for review and in developing a functioning definition of programs are discussed. The criteria used most frequently for existing program review by various agencies are productivity, cost, quality, and need. Four types of reviewers and problems that occur in review, including legal, political, and due process issues, are discussed. Recommendations for the optimal conditions for academic program review are offered. (SW)

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STATE-LEVEL ACADEMIC PROGRAM REVIEW IN HIGHER EDUCATION

Robert J. Barak
and
Robert O. Berdahl

Prepared for the Inservice Education Program
EDUCATION COMMISSION of the STATES

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The Inservice Education Program of ECS is funded primarily by a five-year grant from the W. K. Kellogg Foundation, with additional funds from ECS, SHEEO and meeting registration fees.

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BY ROBERT J. BARAK AND ROBERT O. BERDAHL

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Education Commission of the States
Denver, Colorado 80295
Warren G. Hill, Executive Director

February 1978

Publication of this report was supported in part by a grant from the W. K. Kellogg Foundation, Inc.

Additional copies of this report may be obtained from the Education Commission of the States, 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80295. Price per copy is $5.00 and the price covers postage and handling. Prepayment is required.

FOREWORD

Legislators, governors, statewide coordinating and governing boards and the academic community generally, have major responsibilities in assuring that the best possible programs and the optimal array of programs are offered by institutions of higher learning. How these responsibilities are carried out varies greatly from state to state.

Efforts to expand or retain programs are avid in some places and at times are irresistible. Competition for development of programs is intensive both within and among many institutions. In funding institutions of higher learning, the state must hold them accountable to the public.

The crucial and delicate issue is how colleges can maintain autonomy, which is imperative if they are to serve well in a free society, and on the other hand, how the state can be assured that maximum value is obtained from its investment in programs of higher education.

The study by Robert O. Berdahl, Professor of Higher Education, State University of New York and Robert J. Barak, Director of Information and Research, Iowa Board of Regents, is an excellent analysis of how the states are addressing the review of programs. Both practical and theoretical perspectives are presented, and specific recommendations are tendered.

The study has been done in response to interest expressed throughout the country on this topic.

The Inservice Education Program of the Education Commission of the States and readers of this report are in the debt of the authors for analyzing well a difficult topic with considered judgments.

Appreciation goes also to Amy Plummer who helped in editing this, the second edition of the study, and to Adrienne Sack who typed the manuscript.

Louis Rabineau, Director
Inservice Education Program

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I. INTRODUCTION

The development of higher education in the United States has been primarily an incremental process. As new student populations and financial investments vastly enlarged the undertaking, new programs, even new kinds of institutions, have been added on, constantly changing the shape and nature of the enterprise. Today, however, the process of change is not one of growth, rather it is one of contraction. Current and anticipated enrollment declines and the drying up of funding sources spell an end to expansion.

While some refer to the contemporary situation as a "steady state," we concur with others who regard the situation as anything but "steady." Lyman A. Glenny, for example, points to numerous factors that essentially suggest retrenchment: the reduction in categorical federal programs of institutional aid with a corresponding shift to student tuition assistance; the decline in birth and college attendance rates; the diminishing proportion of aid allocated to higher education in state budgets; and finally, the ravages of inflation.[1]

Yet financial retrenchment need not result in the loss of viability or quality in higher education. And the process of contraction need not parallel the somewhat mindless incremental process of growth. As Warren Bennis has commented, this could be a period of "creative retrenchment."[2] Ways must be found to enable higher education to remain viable and dynamic within the constraints of existing or diminishing or, at the very best, slowly increasing resources.

In this study we explore one such way for preserving the quality and responsiveness of higher education, the academic program review process. The state level program review process has developed in response to growing pressures for accountability, coordination and efficient use of resources and we believe it holds the promise of helping what could be a sorry situation. State agencies around the country, many themselves but recently emerging, are only now beginning to make serious use of the review process. Standing in their way are various difficulties -- e.g., institutional inertia and mistrust, the threat of political interference from the executive and legislative branches, and a set of procedural and technical hurdles that must be worked out to assure quality, fairness and cooperation.

The goal of our study is to document and analyze the current state of the art of academic program review, and in our final chapter to recommend procedures for possible adoption by the states. Our study and recommendations are based on multi-state site visits, interviews and surveys. (The methodology we used is described in Appendix A.)

A. *Need for Institutional Action*

The most obvious candidates for preserving the quality and vitality of higher learning, are, of course, the colleges and universities themselves. Being closest to the problem and being most concerned about autonomy, the institutions might be expected to take innovative and energetic steps to counteract the negative consequences of declining resources. The existing evidence, however, suggests that most colleges, universities and even multicampus systems have been something less than responsive;

rarely have they seriously reordered priorities or undertaken any kind of extensive program evaluation.

It is not that the colleges and universities are unaware of the troubling times. In a recent Glenny study covering the years 1968 through 1974 conducted for the Carnegie Council on Policy Studies in Higher Education, nearly 1,000 administrators expressed their belief that leveling enrollments and funding were damaging to program quality.[3] Among the factors they attributed to the decline in quality were: reduction in course and program offerings; decrease in faculty; cuts in expenditures for equipment, books, related services and for course development, experimentation and program innovation. The administrators emphasized the difficulty they had in reallocating existing resources. Yet the study noted that only three percent of the schools represented had engaged in "extensive" graduate program elimination or consolidation. Another 27 percent reported that they had eliminated or consolidated "some" graduate programs.

Several other studies confirm the Carnegie findings. Fulkerson, in a report of the American Association of State Colleges and Universities, noted that frequently institutions have responded to financial exigency by ". . . across-the-board cuts which remove the need for decision making about who, or what positions, need to be cut."[4] When this type of program reduction was resorted to Fulkerson notes that:

> this method of resolving the financial problems produced a barrage of questions about the college or university's mission, questions which affect the long-term planning and future of the institutions, but which were ignored due to the immediacy of the impending fiscal reduction. Thus faculty and administrations needed time to assess the potential effects of their actions on the programs, the student and the educational goals. This time was not always available.[5]

This common tenth hour response to budgetary woes indicates that few institutions have begun to plan systematically for the likely program retrenchment ahead.

In another study prepared for the National Board on Graduate Education (NBGE), Brenemann found that

> the financial stress and changing labor market conditions experienced by departments in the "arts and sciences" disciplines have not stimulated many major program changes. Most departments visited in the course of this study seem to be following what has been labeled elsewhere as an "enclave" strategy, i.e., a conservative strategy designed to maintain the status quo. During the site visits we observed little evidence of leadership on the part of graduate faculty or administrators in pressing for a re-examination of the goals and purposes of the various graduate programs.[6]

The final report of the NBGE stated that "if universities drift through the next four to five years in the hope that something will brighten the picture, we foresee a wrenching and extremely damaging downward adjustment in the 1980's that could be minimized by careful planning and action now."[7]

The NBGE urged that

> faculty members, administrators, and graduate students in each university must discuss seriously the type of graduate programs that the institution can reasonably be expected to offer. This review should include a realistic assessment of the quality of current graduate offerings, an inventory of resources available (and lacking), prospects for graduate student support, analysis of recent placements of new graduates, areas of special strength, and so forth.[8]

Lee and Bowen found in their study of multicampus systems that

> at least some campus administrators and perhaps some faculty would rather not have to make decisions which appear required: it is easier to accept a program cut handed down from the central offices than to impose one on friends and colleagues.[9]

At multicampus systems progress toward comprehensive reviews of new and existing programs has also been slow. In their first study of multicampus systems in 1971, Lee and Bowen noted that reviews of new and existing academic programs were conducted in the context of expansion.[10] The emphasis was placed on discrete evaluations of proposed new programs on a campus-by-campus basis. Systemwide considerations were underplayed and reviews of existing programs were rare. By 1975, in their more recent study, Lee and Bowen found that "systemwide review of new academic programs has become more intensive, based on academic quality and campus mission in six or more of the nine systems and on fiscal criteria in eight." Moreover, seven of the nine systems studied had instituted procedures for periodic review of existing graduate and professional programs.[11] But the authors found a wide divergence in the quality and comprehensiveness of these systemwide reviews, and the effectiveness of current reviews of new and existing academic programs in most multicampus systems is certainly questionable.

T. Edward Hollander, Chancellor of Higher Education in New Jersey has written that:

> Shifting demographic and economic trends may result in structural and programmatic changes that will seriously test higher education. These undesirable outcomes are possible if we fail to understand and plan for exogenous changes that will influence the scope and mission of our enterprise. On the other hand, we can try to understand and shape our future rather than be shaped by it. (Hollander, 1975)[12]

B. Need for Objectivity

Even if administrators and faculty were better able to take a hard look at their programs, both new and existing, many observers believe their inherent self-interest robs them of the objectivity necessary for an effective evaluation of programs. Professors Kaplan, Whitehouse and Williams of the University of Michigan have stated that "as far as possible evaluation should be made by objective, impersonal processes or by experts with no self-interest in the institutions being evaluated or in the results of the evaluation."[13]

Dressel et al. have also noted that even "the desire of the institution to introduce a new program . . . introduces a bias in the data selected for inclusion or omission in the request and the way in which the data included are exhibited and interpreted . . . enrollment projections . . . are likely to be optimistic, and the costs are likely to be underestimated.[14]

C. Need For Accountability

The disillusionment of the body politic with postsecondary education has resulted in a questioning of many current practices and in a demand for greater efficiencies. Howard Bowen has suggested that these demands for accountability "reflect in part a failure of confidence in many of our institutions and in part frustration over rapidly increasing costs."[15] Many in higher education feel that such demands threaten institutional autonomy and vigorously resist external pressures for greater accountability.

But such automatic responses frequently ignore the relative nature of

institutional autonomy. Kenneth Mortimer has noted that the "real issue with respect to institutional autonomy and accountability is not whether there will be intervention by the state but whether the inevitable demands for increased accountability will be confined to the proper topic and expressed through a mechanism sensitive to both public and institutional interests."[16]

The proper balance between external and institutional interests in the program review process is difficult to define. Even the prestigious Carnegie Commission on Higher Education in its report on state-higher education relations[17] failed to define explicitly the relative responsibilities appropriate to academic program review for existing programs. It might be inferred, however, that the Carnegie Commission's recommendations for state influence and even control over "major new endeavors" and "effective use of resources," implies a concommitant responsibility to undertake periodic reviews of new programs to ascertain whether they are being carried out consistent with the effective use of resources.[18]

The search for a "sensitive mechanism" for reviewing academic programs is currently being made by diverse agents (some of questionable sensitivity) including legislative program auditors. A recent series of articles in Higher Education in New England indicates that legislators are becoming dissatisfied with merely inspecting budgets or passing laws. They are now wanting to know the impacts of their legislative measures. As a result, legislators in some 28 states have established post-audit oversight activities. While the effect of these activities on higher education has thus far been limited, the implications should be obvious.[19]

Glenny et al. in a study of budgeting in 17 states found that 14 have separate executive or legislative staffs that perform policy-oriented performance evaluations, as distinct from routine fiscal audits. In most instances the authors found that the separate audit staffs had made performance studies of colleges and universities and noted that the staff's role "in budgeting for higher education will probably grow increasingly important."[20] The table below from the Glenny et al. study shows the "Performance Audit Staff Location and Studies of Higher Education."

Performance Audit Location and
Studies of Higher Education

	Location of Separate Audit Staff			
	Reports to Governor	Reports to Legislature	Reports to Independent Agency	Total
Audit Staff has made Studies of Higher Education (11 staffs in 9 states)	2	9	-	11
Audit Staff has not made Studies of Higher Education (6 staffs in 6 states)	2	3	1	6
Total (17 staffs in 14 states)	4	12	1	17

Source: Lyman A. Glenny et al., State Budgeting for Higher Education: Data Digest, (Berkeley: Center for Research and Development in Higher Education, 1975), p. 16.

A forthcoming publication (Folger et al., 1977) provides a further in-depth description and analysis of state-level performance audit and review in higher education.[21]

The need for action, objectivity and accountability all indicate the

necessity for some kind of extra-institutional review. We believe the state higher education agency is the appropriate body to take on this responsibility.

In a previous publication, Berdahl noted that

> Most scholars have concluded. . . that neither the organs of state government nor the institutions of higher education are capable of conducting the finely balanced assessments involved in program review, the former because the issues are too complex for nonprofessionals to handle and the latter because their own self-interest often inhibits their objectivity. Thus, coordinating agencies -- because they combine a statewide perspective with a specialized knowledge of higher education -- have increasingly been called upon to play a central role in these decisions. (Berdahl, 1971)[22]

It is perhaps axiomatic that few issues are more sensitive to higher educators than those involved in state-level program review and approval. The idea that "outsiders," "state bureaucrats," "representatives of a political environment," or even a "governing board staff" might meddle in institutional academic affairs is probably more threatening than all other administrative and coordinative aspects of statewide coordination. The principle of "peer evaluation and review" in academe appears to be as well established as the skepticism towards program review performed by anyone outside academe.[23]

Despite this entrenched institutional preference for self-determination, the role of statewide coordinating/governing agencies in the program review and approval process has been growing steadily. The development of the program review function has paralleled the development of the agencies themselves.

D. Growth of State Agency Reviews

The number of state level coordinating/governing agencies for higher education and the role and scope of their responsibilities have steadily increased. In several states the early coordinating agencies were largely dependent upon the voluntary efforts of the individual institutions. Subsequently this form of coordination proved unsatisfactory and new agencies were established with more regulatory responsibilities over higher education. More recently, in North Carolina, Wisconsin and Utah, coordinating agencies were abandoned; consolidated governing boards replaced the institutions' or systems' boards of trustees. The new consolidated boards thus had virtually complete governing and coordinating powers over public higher education.

Usually included among the powers of the state-level agencies has been the responsibility for program review. The first reviews were primarily for new programs but more recently have been expanded to include existing programs as well. Like the development of agencies, themselves, the program review function has emerged from relative obscurity to an important role in the coordination and planning of higher education. While there were some early examples of governing/coordinating boards playing a decisive role in curricula matters, even to the point of approving textbooks, these were clearly the exceptions rather than the rule.[24] Most early coordinating agencies did not involve themselves in academic programs.

Beginning in the 1950's, however, some degree of program review was exercised by a few coordinating agencies primarily in relation to the

budgetary process. The classic example of this is the Board of Education Finance in New Mexico which influenced a control over programs through its budgeting powers.[25] The New Mexico Board influenced program decisions through such techniques as requesting and sometimes publishing data on class size, teaching loads, cost per student-credit hours and number of graduates per year. In addition, it asked that all new programs and services be listed as separate budget items and be fully justified. According to Berdahl the board then ". . . pushed steadily to cut back on redundant courses and degree programs by pegging faculty salary increases to increases in class size, by refusing to budget new faculty positions when data indicated that a department lacked self-restraint. . ."[26]

As budgeting procedures became more refined throughout the country with the introduction of uniform accounting practices and information systems in the early 1960's, it became clear that more exacting program review procedures were also needed. Program Planning and Budgeting Systems (PPBS), for example, were developed with the long-range goal of having ". . . multiyear estimates of both costs and benefits of every proposed program and its major alternatives."[27] (To date the efforts at developing PPBS have fallen short of this goal.)[28]

Both budget review and program review were also soon recognized as sharing an important relationship with long-range, statewide planning.[29] As the emphasis on planning grew, the program review function became an ". . . important power in its implementation and orderly development."[30]

Planning during the 1960's was primarily concerned with the extension of educational opportunities to a larger and more diverse student

population. Consequently, program review largely involved the establishment of new institutions, new campuses and new programs. The nature of the relationship between program review and planning during that period has been described by Glenny et al., who asserted that statewide planning, if it has been done and done well, could have established institutional missions within which proposed new programs could be evaluated.[31] However, the authors regarded program review as indispensible, whether or not long-range planning had occurred.[32] During the 1960's the review of existing programs occurred only sporadically.

Glenny et al. points out that little debate now exists on the necessity of a centralized review of high cost graduate programs or of a centralized determination of priorities in the development of new programs or campuses. The authors note, however, that enthusiasm decreases markedly for the review of undergraduate programs and there is considerable apprehension towards agency powers over course approval and reallocation or elimination of existing programs.[33] The elimination of existing programs is extremely sensitive since it may involve changes in staff, disruption of student expectations and the reallocation of resources.

Nevertheless, the recent Education Commission of the States (ECS) Task Force on Coordination, Governance and Structure recommended that the scope of program review and evaluation be expanded to include reallocation, reorganization or even discontinuance of units as defined. This expansion in the scope of program review was deemed necessary by

the need for retrenchment and reorganization in response to decreasing enrollments.[34] However, the ECS task force also recommended that new courses be evaluated only at the institutional level.

A comprehensive assessment of state-level program review functions has not been undertaken, although the disagreement has appeared with Glenny's 1971 assessment:

> An overall assessment of the program review function is that it has been moderately successful in controlling new program expansion and in setting diverse functions among institutions. Agencies have been far less successful in eliminating existing programs or in maintaining differential functions.[35]

E. State Agency Structure and Responsibilities for Program Review

The literature on statewide coordinating of higher education generally notes three different types of coordinating agencies. These types are:

I. Voluntary agencies in which coordination is performed by the institutions themselves operating with some degree of formality.

II. Coordinating agencies established by statute but not superseding institutional or segmental governing boards. The statutory coordinating agencies may be further divided into advisory and regulatory types. Advisory coordinating agencies essentially have the power only to "recommend" or "advise" whereas boards with more regulatory powers can actually require institutions to comply with regulations within the agency's powers of jurisdiction.

III. Governing agencies function either as the governing body for the only public senior institution in the state or as a consolidated governing board for multiple institutions, with no local or segmental governing bodies.[36]

These three types of agencies differ considerably in their respective powers over academic program review. As Berdahl has pointed out:

> In theory all consolidated governing boards would have... such program review powers: What the board giveth, it can taketh away. Coordinating boards on the other hand vary widely in their powers to review programs, ranging all the way from no mention at all of the issue in the enabling legislation, to granting power only to recommend..., to authorizing final powers in certain fields or for certain types of institutions, to granting blanket regulatory powers over all public higher education, to even folding in private sector programs in New York.[37]

Boards also vary widely in the actual exercise of their powers. Some consolidated governing boards play a very limited role in program review while a few coordinating agencies with little or not statutory responsibility for program review have even reviewed existing programs and have been relatively successful in terminating some questionable programs. While extremely rare, some voluntary coordinating groups have been successful in preventing program duplication. In Iowa, for example, a voluntary coordinating body was instrumental in achieving substantial modifications in a new program proposed by a private institution.

Coordinating type boards differ considerably in both authority for program review and in their use of that authority. It has been widely recognized that legal authority for review by an agency may not, for numerous reasons, be exercised; on the other hand, authority which may not exist in law may be exercised by other means.[38] An example of the latter was the situation in New Mexico mentioned above where program review powers emerged de facto from the exercise of budgetary powers.

The growth in state-level agency program review responsibility is illustrated in Table 1 based on data from 1960 and 1975 surveys.[39] [40]

Table 1

Growth in State-Level Program
Review Responsibility Since 1960

Criteria	1960*				1975**			
	Governing Agencies		Coordinating Agencies		Governing Agencies		Coordinating Agencies	
	#	%	#	%	#	%	#	%
Number of Agencies	16	100	8	100	19	100	28	100
Program Approval Authority	16	100	3	38	19	100	20	72
Program Review & Recommendation Only	0	0	4	50	0	0	8	28
No Program Review	0	0	1	0	0	0	0	0

*Source: S. V. Martorana and E. V. Hollis, State Boards Responsible for Higher Education, U.S. Office of Education, 1960.

**Source: Higher Education in the States, Education Commission of the States, "Survey of the Structure of State Coordinating or Governing Boards and Public Institutional and Multicampus Governing Boards of Postsecondary Education -- As of January 1, 1975." Volume 4, No. 10, pp. 297-352.

In 1960 there were sixteen state-level governing boards, and in 1975 there were nineteen governing boards, all of which had potential program review authority. In 1960 there were eight state-level coordinating agencies, three with program approval authority and four with authority "to recommend." In 1975 there were twenty-eight coordinating agencies of which twenty had program review authority and eight had authority to recommend program approval.

F. Relation of Program Review to Budget Review and Planning

While program review is now viewed as a process in its own right, it has an important and growing relationship to both budgeting and planning. Neither program review, nor budgeting, nor planning, can occur in

isolation if institutions are to respond creatively to the possibility or actuality of retrenchment. Obviously, programs require appropriate financing if they are to be meaningful; and if necessary financing is to be available, appropriate institutional, segmental and state planning needs to take place.

The example of New Mexico's early approach to program review demonstrates how budgetary responsibilities are often related to program review. In some other states, approval of a new program is often contingent upon termination of an existing program or upon the specific appropriation of funds for the program.

The provisions for new program approval in a number of states also require that the program be integrated into the state master planning process prior to state-level approval.

The ultimate attempt to integrate planning, programming and budgeting has been the so-called Planning, Programming and Budgeting System (PPBS). But PPBS has proven to be of limited value when applied to higher education. Its most serious problem is related to time horizons. Balderston has noted that:

> One basic idea in PPBS is to specify what is to be accomplished in each program in each future year and then to calculate how many resources will be needed for the program and to specify when these resources have to be acquired and at what cost in order to meet the schedule for the program. This system forecasts the cost of the program over a series of years and sets forth the timing of these costs, thereby avoiding seemingly innocuous first-year commitments to programs that eventually turn out to be far more costly than originally contemplated. It is still quite possible to make a poor choice of program or to underestimate its costs, and PPBS did not altogether solve the problem of mistaken and misunderstood

commitments, even in the Department of Defense. But it was certainly a far more sensible conceptual approach than the political jockeying that got programs started on false promises and then built them into unstoppable and large claims later on.

Universities found that, although they tried to show the multiyear budgetary implications of programs, their funding sources were unwilling or unable to look beyond very short commitments -- typically, the single budget year. Administrators were very much aware that most of what they were trying to sustain in existing programs or to initiate in new ones had implications for costs and horizons for results that stretched far beyond the immediate arguments of the up-coming fiscal year. But they have generally not been able to deal with the multiyear horizon except in terms of very contingent internal planning or by announcing noble hopes whose realization would be heavily dependent on future decisions of outside funding agencies. The most enduring legacy of the program budgeting experience of universities has been the development of a much more sophisticated analytic spirit, both within the university and in state and federal agencies.[41]

II. ANALYSIS OF NEW PROGRAM REVIEWS

Our analysis will consist of three parts: a discussion of what "programs" are reviewed; the criteria used in reviewing new programs; and the process or mechanism of review. It became quite evident early in our state visits, that the process or mechanism of review was the most crucial factor in effective reviews. When participants viewed the process as flexible and fair, they then tended to perceive the overall review more favorably despite any identified deficiencies in the selection of programs reviewed or the criteria used to review them. The latter two, if deficient, were often viewed as susceptible to later improvement through a fair and flexible process. Consequently, primary emphasis in this analysis will be placed on the process of program review.

A. Programs to be Reviewed

Which programs were subject to state level review varied considerably among the states. Some state higher education agencies review only major new graduate or doctoral programs involving legislative requests for new funding. At the other extreme some state agencies review all new academic programs, all changes in degree designation, all new tracks (majors and minors within a degree designation) regardless of whether any new costs are involved. A few agencies even review proposed course changes.

The lack of a specific definition of programs subject to review was a frequently reported source of major problems. The definition of program used by a particular coordinating agency needs to be specific enough not to be subject to institutional variation. The distinctions between

program, major, area of emphasis, concentration, option, and specialty were frequently found to be so vague that institutions could, if they wanted to, reclassify a program to avoid a review. In Montana, for example, institutions offered, through continuing education or summer session, courses which they would not otherwise have been eligible to offer (a new policy now prevents this). In South Carolina, the definition of "major" had to be tightened due to the penchants of several institutions for labeling groups of courses concentrations and insisting they were not new programs.

Andrew J. Rudnick has proposed the following definition of "program" for use in proposed new legislation in Alabama:

> (1) Any instruction or series of courses not previously in the curriculum and arranged in a scope and sequence leading to a degree at any level, or to a credit certificate, and including new majors in any degree program already established.
>
> (2) Programs in research, public service, or any combination of these with instructional programs but only when such programs depend in significant part or in full upon direct legislative appropriation for support.
>
> (3) The initiation of programs, either existing or new, in teaching, research, or public service in new off-campus locations.
>
> (4) The creation or establishment of a new public institution of higher education, either by the creation of an entirely new entity or by the merger with or consolidation of existing entities, public or private, or by the transfer or assignment of any teaching, research, or public service programs by and among existing institutions or systems, public or private.[42]

One statewide coordinator reported that his state had solved this problem by adopting the principle that "...if a program (by whatever name) is to

be advertised in any media as a separate identifiable entity, it is then subject to the review mechanism...and if in doubt it should be subject to the review process."

An important distinction in the definition of programs to be reviewed proved to be that between degree programs and tracks or agencies reviewing only full degree programs have frequently encountered the problem of many institutions asserting that the new program "won't cost anything because the courses are already being taught and the faculty and other resources are already on board." In some states institutions have also developed tracks as options under an approved program rather than designating them as a new program, thus, they avoided the concomitant approval procedures. The review of courses is one way to approach the problem. However, the review of courses, especially in a large state, is deemed unmanageable and could more easily interject the coordinating agency into infringements on academic freedom. Course control, as proposed by one agency staffer below, does have some possibilities:

> If the rationale for controlling progress is to attempt to maintain average class size at an efficient level by restricting curriculum proliferation it might be more effective to control the number of courses (or course credit hours) which an institution may offer, in addition to the number of courses. Presumably the authorized number of courses would relate to the total student body size, and to authorized degree programs. If a number could be established for the maximum number of courses to be offered at an institution the institution would then be permitted to add additional courses up to that limit. In order to create new courses after the limit is reached, the institution would be required to delete an existing course or obtain authority to increase the number of courses offered.
>
> The number of authorized courses could be controlled by level and discipline as well as by total number. If this were done, the process for developing the number

> of courses might be the counting of courses required for various authorized degree programs and the identification of courses shared by several degree programs. Authorization of new programs or additional courses could then be coupled. Proposals for new programs would specify number of new courses to be added and identification of existing courses to be used.
>
> Monitoring and enforcement could be handled by maintaining a file of authorized courses and matching with data on the Student Data Course File. Any course on the Student Data Course File and not on the currently approved list would not generate fundable credit hours. The list of currently authorized courses could be modified annually by the university provided that the number of courses at each level in each discipline did not exceed the authorized number.

Perhaps more effective than course control has been the review of tracks, majors and even minors within a degree designation. The review of tracks may enable the coordinating agency to review an area of specialization before significant resources have been committed. Program inventories in Florida and Kansas now include tracks or subspecialties.

The scope of programs reviewed by the state higher education agencies seemed to be a result of either a statutory or a voluntary delineation of programs to be reviewed. The statutory aspects of program review may be quite explicit such as those in Indiana quoted here:

> Public Law 326. Sec. 8(3) Programs. To approve or disapprove the establishment of any new branches, regional or other campuses or extension centers, or of any new college or school, or the offering of any additional graduate degree. The Commission may review new associate and baccalaureate degree programs in any academic area by any state educational institution with the power to approve or disapprove.

Statutory responsibilities may also be less explicit such as those in Iowa which confer upon the Board of Regents broad discretionary power

to govern the state universities. The interpretation of statutes in this area is not always clear and in at least one state (Michigan) the coordinating agency's authority to grant prior approval of new programs at public baccalaureate institutions has been legally challenged.*

It should be noted that the mere possession of statutory authority by a state agency to review academic programs does not necessarily mean that an agency does in fact review programs, nor is it necessarily an indication of the extensiveness of that process. Nor does the mere absence of explicit statutory responsibility for program review necessarily inhibit an agency from reviewing programs. Some of the most vigorous reviews are conducted by state agencies without specific statutory responsibility for program review.

In some cases agencies have voluntarily limited the scope of program review in order to use their available staff resources most effectively or in order to concentrate efforts on areas of special concern such as graduate programs.

In a number of states, agencies deliberately limited the overall program review effort or slowly expanded it in order not to upset the delicate balance between the institutions' strong desire for institutional autonomy -- especially in the academic affairs -- and state officials' desire

*In this instance the State Supreme Court ruled in essence that the state constitution provides autonomy to the institutions in terms of their internal operations, that the role of the State Board of Education is advisory in nature on program review matters. However, the Court granted specific recognition to the State Board's planning and coordinating functions by mandating that the institutions are required to provide information on new programs and financial requirements to the State Board in order for the Board to carry out its advisory role. Constitutional changes have since been proposed that would increase the state agency's review authority.

for evidence of greater efficiency in education. Below is a partial list of the many different ways in which limitations have been made to the kinds of new programs reviewed by many state agencies:

1. By program level (or general category "degree programs")
   a. lower division (community/junior college)
   b. upper division
   c. Masters
   d. Doctoral
   } or Graduate
   e. Professional
2. By funding level or source
   a. fixed amount
   b. need for state legislative appropriations
   c. type of external funding source
3. By length of program
   a. financial commitment, per number of years
   b. length of program duration
4. By organizational level/unit
   a. instruction (college, school, institution, department)
   b. research
   c. administration
   d. public service
5. Changes of existing programs
   a. track
   b. improved
   c. expanded
   d. terminated

6. By sector
    a. public
    b. private
    c. proprietary
7. By certification
8. By accreditation
9. Credit and noncredit

When to review a new program is another touchy issue. The California state agency has recently determined to consider new programs projected for initiation two to five years in the future, instead of reviewing and commenting on them only shortly prior to their implementation date. This approach requires a concomitant emphasis on longer-range academic planning, an emphasis which was found wanting in some of the states visited. The California Commission staff provided the following description of the way in which this longer-range review will be done:

> In conjunction with an intersegmental council, the Commission has developed a schedule for the annual submission of long-range plans to the Commission, and a process for determining program areas in which an excess of programs may now or soon exist, or which may require a special study. Among the criteria for identifying such program areas are the number and location of existing and proposed programs; the employment market; the cost of the program; and student demand. The identification of certain program areas is intended to discourage the institution from proceeding with their plans for a new program in that area. If the college proceeds anyway, or if it proposes a program not appearing previously on its five-year plan, the Commission will review that proposal with special emphasis on the circumstances cited in its justification.

It is probably too early to effectively assess this process in California since it has only recently been implemented. A similar plan is being

developed in Kentucky. This general approach should mitigate the problems of large numbers of individual program requests, their frequently late submission, and the potential overlapping of the review function as performed by institutional, segmental and coordinating agency staffs. On the other hand this approach may have the disadvantage of restricting institutional responsiveness by preventing the swift development of programs for which there may be a unique and even urgent need.

B. *Criteria Used for Program Review*

Almost all of those we interviewed expressed concern about the criteria used to review new programs. We heard distress about the "quantitative" nature of most of the criteria and the relatively slight concern with "qualitative" criteria. Faculty were particularly critical on this point even though they generally admitted that they had no suggestions on how to make the criteria more qualitatively oriented. The quality of a program, they felt, could best be judged by peers within a given academic discipline.

The biggest problem with "quantitative" measures was the fear that they are or could be used arbitrarily across institutions and disciplines without taking into consideration the many unique differences among types of institutions and disciplines. While some individuals totally ruled out the use of quantitative data for reviewing programs, most indicated that they would have less concern about their use if they were but one of several kinds of criteria employed in evaluating a new program.

The qualifications of the staffs of the state-level agencies doing the reviews was a related concern. Most state level staff were categorized by institutional representatives as lacking "academic experience" which they invariably defined as "X" number of years in the classroom. Academics feared that such personnel, lacking the desired experience, would rely too heavily and too inflexibly on quantitative measures. Even if the state-level personnel had creditable academic experience, their relative remoteness from the campus was seen as possibly diluting their perception of academic concerns.

Figure 1 provides a simplified profile of the seven major factors commonly included for new program review in the various states. The seven factors are: (1) program description; (2) purposes and objectives; (3) need analysis; (4) cost analysis; (5) resource analysis; (6) program accreditation; and (7) availability of adequate student financial aid. (The degree of specificity of the required response to each component varies considerably between the states.)

1. Program Description. The first required factor for a new program review is a description of the program being proposed. This could range from a simple catalog-type statement to a comprehensive, well-documented report including the entire proposed and related curriculum, prerequisites, credits, method of instruction, degree(s) to be granted and courses taught by related departments. The program description also establishes the context within which the other factors may be considered.

2. Purposes and Objectives. While the degree of detail required in this statement varies, it generally consists of what the proposed

FIGURE 1

State	Degree Level (if indicated)	Program Description: List Curriculum	Prerequisites	Credit	Method of Instr.	Degree	Description	Purposes and Objective: Consistency w/ Master Plan	Consistency w/ Inst. Mission	Other	Need Analysis: In-State Need	Student Demand	Manpower/Oppr.	Other	Dupl./Coop.	Cost Analysis: Direct Costs	Indirect Costs	Reallocation	No. Yr. Proj. Cost	Source of Funds	Resource Analysis: Related Programs	Faculty/Staff	Educational	Facilities	Administration	Accreditation: Timetable	Status	Needs	Evaluation: Prior Approval Required	Post-approval (time if indicated)	Statement of Adequate Funding	Availability of Adequate Student Aid
Alabama	D (11)	x	x	x		x	x		x		x	x	x	x	x	x			5	x	x	x	x	x								x
Alaska																																	
Arizona	Graduate	x	x	x		x	x					x	x		x	x			6		x	x	x	x	x	x	x	x				
Arkansas	A & B	x					x	x			x	x	x		x	x			4	x	x	x	x	x	x	x	x	x				
	M	x	x				x	x			x	x	x	x	x	x			4	x	x	x	x	x	x	x	x	x				
	D	x	x				x	x			x	x	x	x	x	x			4	x	x	x	x	x	x	x	x	x				x
California (18)											x	x	x	x	x	x												x				
Colorado	All (except occupational)	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	4	x	x	x	x	x		x	x						
Connecticut	(16) All					x	x		x			x	x		x	x					x	x	x	x					x				
Delaware																																	
Florida	All	x				x	x		x	x	x	x	x	x	x	x			5	x	x	x	x	x		x	x	x	x				x
Georgia	All	x					x		x	x	x	x	x	x	x	x	x		3	x		x	x	x			x		x		6		x
Hawaii (1)	All	x	x		x		x		x			x	x	x	x	x	x		6	x	x	x	x	x			x		x				
Idaho (2)	(Phase I)								x			x	x	x	x	x	x		3	x	x	x	x	x	x	x	x	x	x				
	(Phase II) All	x	x									x	x			x	x	x	3	x	x	x	x	x				x					

FIGURE 1 (Continued)

State	Degree Level (if indicated)	Program Description						Purposes and Objective			Need Analysis					Cost Analysis					Resource Analysis					Accreditation			Evaluation		Statement of Adequate Funding	Availability of Adequate Student Aid
		List Curriculum	Prerequisites	Credit	Method of Instr.	Degree	Description	Consistency w/ Master Plan	Consistency w/ Inst. Mission	Other	In-State Need	Student Demand	Manpower/Oppr.	Other	Dupl./Coop.	Direct Costs	Indirect Costs	Reallocation	No. Yr. Proj. Cost	Source of Funds	Related Programs	Faculty/Staff	Educational	Facilities	Administration	Timetable	Status	Needs	Prior Approval Required	Post-approval (time if indicated)		
Illinois (19)	All	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	5	x	x	x	x	x	x			x		x		
Indiana	All	x				x	x	x	x	x	x	x	x		x	x	x	x	4	x	x	x	x		x			x		x		
Iowa	All					x	x		x		x	x	x		x	x			4			x	x	x			x	x				
Kansas	All							x (3)	x (3)			x		x	x					x	x	x	x	x					x			
Kentucky (19)	M and Prof D	x	x			x	x		x	x	x	x			x	x	x		2	x	x	x	x	x	x	x	x				x	
Louisiana	All	x	x			x	x				x	x		x	x	x	x		4	x	x	x	x	x	x	x	x	x	x (D only)	x (2 yrs)		x (Grad only)
Maine																																	
Maryland (2) (12)	A B,M & D	x x			x	x	x x	x	x	x	x	x	x		x	x	x		5 3		x	x	x	x	x		x	x	x	x			
Massachusetts (10) (12)	All	x	x	x		x	x	x	x	x	x	x	x		x	x			5	x	x	x	x	x	x		x					
Michigan	All	x	x	x	x	x	x	x	x		x	x	x		x	x			5	x	x	x							x			
Minnesota (5)	All	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x		x	x	

FIGURE 1 (Continued)

State	Degree Level (if indicated)	Program Description						Purposes and Objective			Need Analysis					Cost Analysis					Resource Analysis					Accreditation			Evaluation		Statement of Adequate Funding	Availability of Adequate Student Aid
		List Curriculum	Prerequisites	Credit	Method of Instr.	Degree	Description	Consistency w/ Master Plan	Consistency w/ Inst. Mission	Other	In-State Need	Student Demand	Manpower/Oppr.	Other	Dupl./Coop.	Direct Costs	Indirect Costs	Reallocation	No. Yr. Proj. Cost	Source of Funds	Related Programs	Faculty/Staff	Educational	Facilities	Administration	Timetable	Status	Needs	Prior Approval Required	Post-approval (time if indicated)		
Mississipp	All	x	x	x		x	x		x			x			x	x				x	x	x	x	x		x					
Missouri	B	x				x	x		x			x	x		x	x	x	x	4	x	x	x	x	x	x	x	x	x			
	M	x				x	x		x			x	x		x	x	x	x	4	x	x	x	x	x	x	x	x	x	x		
	D	x				x	x		x			x	x		x	x	x	x	4	x	x	x	x	x	x	x	x	x			x
Montana (6)																																
Nebraska (13)		x					x		x			x	x	x	x	x			3	x	x	x	x	x	x		x					
Nevada																																
New Hampshire																																
New Jersey		x	x			x	x								x					x	x	x	x	x						x		x
New Mexico																																
New York (17)	All	x	x	x		x	x	x	x	x	x	x	x		x	x	x			x	x	x	x	x			x		x (opt)			x
North Carolina	All							x	x		x	x	x	x	x							x	x	x					x (opt)			

FIGURE 1 (continued)

State	Degree Level (if indicated)	Program Description						Purposes and Objective			Need Analysis					Cost Analysis					Resource Analysis					Accreditation			Evaluation		Statement of Adequate Funding	Availability of Adequate Student Aid
		List Curriculum	Prerequisites	Credit	Method of Instr.	Degree	Description	Consistency w/ Master Plan	Consistency w/ Inst. Mission	Other	In-State Need	Student Demand	Manpower/Oppr.	Other	Dupl./Coop.	Direct Costs	Indirect Costs	Reallocation	No. Yr. Proj. Cost	Source of Funds	Related Programs	Faculty/Staff	Educational	Facilities	Administration	Timetable	Status	Needs	Prior Approval Required	Post-approval (time if indicated)		
North Dakota (15)																															
Ohio	A	x		x		x	x				x	x	x			x				x		x	x	x		x				x
	B & M	x				x	x				x	x	x			x				x		x		x	x						
	D	x					x				x	x	x	x	x	x			5	x		x		x	x		x		(opt)		
Oklahoma		x				x	x				x	x		x					5			x	x	x							
Oregon	All							x	x					x	x																
Pennsylvania	B	x	x	x			x		x		x	x	x	x	x	x		x	5	x	x	x	x	x	x					x	
Rhode Island	All						x			x	x	x	x	x	x	x	x	x		x		x	x	x	x				x		
South Carolina	All	x	x			x	x		x	x	x	x	x		x	x			3	x	x	x	x	x		x	x	x		x		
South Dakota	All	x	x	x		x	x		x		x	x	x	x	x	x			4	x	x	x	x	x		x	x		x			
Tennessee	All	x				x	x	x	x	x	x	x	x	x	x	x			5	x		x	x	x	x		x	x	x			
Texas	All (7)	x		x		x	x		x		x	x	x		x	x		x	4	x	x	x	x	x	x	x	x	x		x		x

FIGURE 1 (CONTINUED)

State	Degree Level (if indicated)	Program Description						Purposes and Objective			Need Analysis					Cost Analysis					Resource Analysis					Accreditation			Evaluation		Statement of Adequate Funding	Availability of Adequate Student Aid
		List Curriculum	Prerequisites	Credit	Method of Instr.	Degree	Description	Consistency w/ Master Plan	Consistency w/ Inst. Mission	Other	In-State Need	Student Demand	Manpower/Oppr.	Other	Dupl./Coop.	Direct Costs	Indirect Costs	Reallocation	No. Yr. Proj. Cost	Source of Funds	Related Programs	Faculty/Staff	Educational	Facilities	Administration	Timetable	Status	Needs	Prior Approval Required	Post-approval (time if indicated)		
Utah	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x			
Vermont (9)																															
Virginia	All	x				x	x	x	x	x	x	x	x		x	x	x		4			x	x	x					x			
Washington	All (8)*	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	5	x	x	x		x	x	x	x	x	x	x (opt)	x (5 yrs)		
West Virginia (14)	All																															
Wisconsin	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	x	x	x	x	x	x	x	x	x	x	x (opt)	x (opt)		x
Wyoming																																	
Total All Agencies		31	19	15	6	27	33	16	32	17	27	36	31	23	37	34	18	13	5 est.	28	28	39	34	34	21	13	26	17	22	10	4	11

* "x" indicates those categories which a specific state utilizes in its program review process based upon information obtained from either specifically expressed or implied statements of that agency.

(1) New programs have provisional status first full cycle.
(2) Has a two phase process of program review. Phase I is similar to a letter of intent but more comprehensive. Phase II is considerably more detailed.
(3) Requires a ranking of state and institutional priorities.
(4) Separate procedure for new health programs.

(5) The Minnesota review process is currently being revised to include increased detail and clarification. Present criteria include: mission, unwarranted duplication, cost-benefit and need for program.
(6) Currently being developed.
(7) Criteria listed apply generally to all programs; however, there are separate criteria for each degree level (i.e., B, M, D)
(8) Doctoral programs must submit more extensive information. State college programs requiring additional fiscal resources need both council and legislative review.
(9) Vermont is in the process of developing program review procedures.
(10) Has a three stage process: intent to plan, program approval, operational approval.
(11) These criteria are optional and apply to graduate programs only.
(12) Includes private institutions (in some instances this is voluntary on the part of private institutions).
(13) University of Nebraska only.
(14) West Virginia uses a procedure which is difficult to represent in this table (see description in section on existing program.)
(15) North Dakota has a procedure for review but specific criteria were not provided in response to survey.
(16) Public institutions must seek approval for planning and licensure, private institutions only the latter.
(17) Includes public and private institutions.
(18) Program review and long-range planning are integrated into a process in which programs projected for initiation two to five years in the future are considered annually.
(19) The criteria for review of new programs are currently being reassessed.

program is intended to achieve and how it interrelates with the institutional (or other unit) mission and the state master plan (if one exists).

In North Carolina the University System, for example, is developing performance goals for proposed programs in terms of projected enrollment, anticipated accreditation, modification of facilities and faculty development. These performance goals will be a basis for periodical review of programs after establishment.

3. Need Analysis. This section in most states is a justification for the proposed program generally concerned with: the need for the program at the institution and in the geographical area it serves (i.e., state, regional, national or international); the student demand for the program; the projected enrollment; the relationship to manpower needs; the opportunities for employment; the likelihood of unnecessary program duplication within the state and attempts to establish cooperative arrangements with other institutions.

Although such justifications for a proposed program are clearly important there is some agreement that many factors are just based on "quesstimates." For example, manpower projections are notoriously unreliable. Often the reviewers are confronted with different and even conflicting estimates of need and must judiciously exercise their professional judgment.

The determination of "unnecessary duplication" is also frequently a judgmental matter. Some duplication within a given state is viewed as necessary and highly desirable while other program duplications may be easily recognized as unnecessary. Unnecessary duplication of the programs between these two extremes is much more difficult to determine.

Martorana and Kuhns have developed a methodology for analysis of duplicate program offerings on a statewide basis. The principal objective of their research project was the design and implementation of a model for assessing possible program duplication. The project focused on the need for, availability, supply and possible oversupply of degree programs at five levels -- associate, baccalaureate, masters, first professional, doctoral -- in all types of public, private and proprietary institutions chartered to grant degrees in a large eastern state. A basic assumption was that pairs of programs -- with the same Higher Education General Information Survey (HEGIS) classification, at the same degree level -- must be compared in order to determine the extent of program duplication. For each degree program a "unit record" containing a number of data items (program descriptors) was established. Using these unit records, "programming profiles" were developed for types of institutions, degree levels, and educational planning regions. Included in the programs' unit records were indices of geographic co-existence or duplication, availability, graduate production, similarity, institutional need or dependence on the program, and student and manpower demand for the program.[43]

A number of states either have, or are in the process of developing, criteria which would examine the extent to which cooperative programs between institutions and within consortia arrangements have been explored prior to the introduction of new programs. Such arrangements are viewed as important alternatives to a single institution developing an entire new program unilaterally. A statewide coordinator in the midwest indicated that "increasingly it will be necessary to develop certain programs on a statewide rather than just an institutional basis."

4. Cost Analysis. This section establishes the cost (e.g., direct, indirect, incremental and reallocated) of the proposed program for a given time usually ranging from two to six years. The factors generally involved in instructional program costs include the amount required for direct teaching, for instruction-related activities, library, administrative, research and service costs when appropriate.

Also frequently considered in cost analyses are the sources of funds for the proposed program. Many states differentiate the extensiveness of the review by the source of funds. State funded programs have generally received the most extensive reviews. Also, if state funds are needed for a program, the proposal, even if approved with respect to all other factors, may, as in Oklahoma and Arkansas, be dependent upon the subsequent appropriation of state funds for the program. Programs financed fully by nonstate funds used to escape close fiscal scrutiny, however, because many states have recently been asked to pick up the tab for programs formerly supported by nonstate, usually federal funds, the costs examined now include all source funds.

An important problem associated with this cost analysis is the frequent institutional assertion that the proposed programs "won't cost anything" since the faculty and other resources, are already in place. In one sense this appears to be true: over the years faculty with special expertise were added; courses reflecting these faculty interests were added; necessary equipment and resources to supplement the courses were acquired; and, finally, minors in the area were offered. As a consequence, the formal establishment of the new program is like an afterthought. In

another sense, however, the legitimization of the program does cost something -- the faculty must be paid, the resources maintained, the overhead accounted for -- and many states feel that these costs should be identified.

Many state coordinators believe the real issues here are whether the "programs" are being reviewed early enough in their development and whether this approach to developing programs is the most effective and appropriate for serving the "needs of the state."

5. Resource Analysis. The word "resource" is used here in the broad sense to include all the necessary resources, human and otherwise, which are needed to support the proposed program. The analysis of these resources is of both a qualitative and quantitative nature. Some state agencies request a complete vitae for each faculty member, while others are concerned only with the number of individuals involved. A number of states require information on equipment, library resources and facilities. Several states require specific information on the administrative requirements of the proposed program.

The quantitative aspect of this analysis is relatively easy to determine and for many factors, such as libraries, states have developed measurement formulas. The qualitative aspect on the other hand presents many difficulties. Some states use outside peer consultants to help in the assessment of the quality of the resources.

A number of states have learned by experience that meeting accreditation requirements can be quite costly and that the extent of such costs must

be taken into consideration when a program is initially proposed. If the necessary resources are not available to meet accreditation standards most agencies will generally not approve the program.

Accreditation requirements also are used as indicators of program quality. To the extent that a given program currently or potentially meets or exceeds the accreditation standards established in a given discipline a number of states consider it to be of sufficient quality for implementation. A full knowledge of accreditation requirements can also provide the reviewers with some notion of the cost to be incurred in meeting accreditation standards.

6. Program Accreditation. The program accreditation requirement can range from a simple statement regarding who, if anyone, accredits the proposed program to a detailed listing of the accreditation requirements; the present accreditation status (in the case of related or expanded programs); the resources or commitment needed to achieve accreditation; and a timetable for meeting the various requirements. A few states also require that programs meet general standards of quality such as the guidelines of the National Graduate Council.

7. Financial Aid. A few states require evidence of the availability of adequate financial aid for students, primarily in graduate programs. Such requirements usually stem from state policies aimed at maintaining accessibility.

The application of all these factors varies not only among the states but within a given state depending on the availability of resources,

at any given time. During periods of rapid growth and relatively "easy money" the factors may be applied very loosely whereas in times of financial stress the factors may be applied stringently.

C. Process of Review

Different state agencies also use markedly different procedures in their reviews of new programs. The variation ranges from a simple one-step process (from institution to the agency board or commission concerned) to elaborate multi-phase arrangements which may be intimately related to the entire statewide master planning process. For the purposes of analysis we will describe nine generally common features of the various review processes in a sequence beginning with the initial steps and ending with the final steps constituting program approval.

1. Prior Planning Approval. A number of state agencies require that any institution under their purview notify them as soon as initial planning for a new program begins. In some states this requirement may be fulfilled quite informally such as by a telephone call or brief letter of intent. In Colorado, and in Georgia for example, the institutions are asked to consult informally with their statewide boards well ahead of submitting formal proposals; in Washington and Minnesota the notification in advance is required.

While such expressions of intent are often viewed as bureaucratic (and sometimes they are), they can be an important part of the academic planning and coordination process. The following excerpt from a Minnesota document explains one of the major reasons for preliminary notification:

> The primary purpose of this preliminary notification is to provide the Commission with information which

> it in turn can forward to the various systems of post-secondary education in Minnesota. It is very possible, when a particular educational need develops in the state, several institutions of post-secondary education may work simultaneously on the planning of new programs to meet the identified need.

Thus, the preliminary notification can eliminate wasteful duplicate planning and encourage cooperation. A number of instances were reported in which the lack of such preliminary information resulted in wasteful duplicative efforts in which two or more institutions were simultaneously planning similar programs. Furthermore, when the discovery of the duplicative efforts was made, additional problems often resulted because of the institutional hostility created in the process of attempting to decide which, if any, program(s) should be approved.

Preliminary notification of proposed programs can also feed into the statewide planning process and provide the opportunity for state agency-institution dialogue. The resulting dialogue between the state agency staff and the institutional personnel can promote the effective use of resources even if it is viewed primarily as "building political support" for a proposed program at the state level as one dean described it. Such interchange can foster greater understanding and a better working relationship between agency staff and institutional personnel. It can also result in the conservation of resources insofar as a clearer sense develops of what is required for approval. Furthermore, it could also save time and energy in planning as the state agency staff in one state advised that a particular proposed program "had no likelihood of being approved at the present time."

2. Statement of Approval. This second common feature, a statement

of institutional program approval, is often implicit in a request for a new program. In some states, however, explicit endorsement by the legally constituted governing board and/or the institution's or system's chief executive officer is specifically required before it can be considered for state-level approval. Where required, it is more of a formality to assure appropriate prior approvals and institutional commitment to a proposal than anything else. In some states, such as Texas, it is also a statement attesting to the adequacy of funding for the proposed program. Whether such a statement is requested separately, or as part of the prescribed format required of all new program proposals, it is probably a necessary formality in order to maintain proper organizational protocol.

3. Prescribed Format. Almost all of the state agencies have a prescribed format which must be followed by any institution submitting a proposal for a new program. This format can be somewhat flexible; Texas, for instance, provides only a format to serve as a general guide for institutions submitting requests. In most other states, such as Wisconsin, rather detailed specific information is required for response to a number of items. It has generally been the experience of most state agencies that specific detailed formats are the only way of assuring that the responses will be something other than vague and meaningless. It is admittedly difficult to develop a format requiring very specific responses which is still flexible enough to accommodate new approaches and differing situations, and it is even more difficult when state agency staff are inflexible in their determination to get responses to specific formats. If all institutions could be persuaded

to respond conscientiously as some consistently do, such rigid formats would probably be unnecessary.

4. Inter-institutional Review. A number of states include in their review process some kind of review by institutional personnel from within the state, usually academic vice presidents and deans. This inter-institutional review can be informal as in Washington and Florida where each institution in the state is asked to comment in writing on proposed programs from similar institutions, or it can be a formal committee such as the Council on Chief Academic Officers (COCAO) in Kansas or the Curriculum Advisory Committee (CAC) in Minnesota. These committees are composed of institutional personnel with state agency staffers serving as ex officio members. Whether formal or informal, the inter-institutional committee can be an important source of institutional involvement in the state-level program review process which should not be considered lightly by the institutions. Such committees are usually advisory to the state board or a subcommittee thereof.

The most common and recurring problem with such committees is their tendency to "log-roll," a process wherein questionable deals -- or so-called "trade offs" -- are made. This problem has already been identified by other authors; and concerns about it are universal. However, not all trade-offs should be viewed as undesirable. Two kinds of "trade-offs" can be identified. First, there are those trade-offs in which two institutions carve up the turf, agreeing not to develop programs in certain areas in return for certain other areas, thus, complementing each other's activities. This kind of trade-off is generally regarded as desirable.

On the other hand, there are the undesirable trade-offs whereby institutions participate in "bloc voting" (e.g., developing institutions versus the well developed, or vice versa), or "log-rolling" where one institution agrees to support another's request in return for the other institution's support of its program requests. In these latter instances little if any consideration is given to the needs of the state or other wider objectives of the program review process. In addition to the split between the "haves" and the "have nots," one state coordinator noted that there are

> related divisions that reflect unresolved tensions within the academic community over the nature and purposes of graduate education. These differences, which reflect the differing roles of the institutions in graduate education, in turn are reflected in the vigor with which each graduate dean reviews and evaluates proposed programs according to traditional criteria.

The "trade-off" problem is one of the primary criticisms by noneducators and state agency staff of the use of inter-institutional committees. This and the disinclination of such committees to turn down new program proposals contributes toward a general skepticism toward review processes in which primary emphasis is placed on this approach.

Some states have included state agency staffers ex officio to counterbalance the problem of "trade-offs." While this technique may contribute to better state-agency/institutional communications on program review, it probably only slightly lessens the probability of trade-offs since such "deals" can easily occur outside the formal committee meetings.

This criticism of inter-institutional committees should not obscure some of their positive contributions. The concerns about arbitrariness and

inflexibility expressed earlier can be counterbalanced by a review utilizing institutional personnel with ready access to faculty and student concerns. Such committees have also, on occasion, taken on a truly statewide perspective by rising above purely institutional self-interests. Admittedly, these instances are rare but they indicate that if influential committee members, such as commission members, presidents or legislators, can create the proper attitudes in the committee, such committees can be a very important part of the new program approval process. Such guidance has predominately been lacking, however.

It is also important that appropriate procedures and guidelines be set up and followed to insure that when institutions submit programs to the committee, all prior review work (intra-institutionally) will have been of approximately equal quality. The need for consistency is necessitated by the wide range of thoroughness and effectiveness of different institution's internal review processes. Some institutions and segments we interviewed had practically no internal program review while others had rather comprehensive review processes. These differences can cause difficulties and unfairness which unfortunately often penalize those institutions which do a more effective internal review. In one state with several segments, one segment did an especially complete internal review for all programs submitted, while another segment undertook almost no review of programs. The latter merely passed on to the inter-institutional review committee all programs submitted from the individual institutions with the idea that if the inter-institutional review committee reviewed them favorably, they would then devote staff time to

reviewing the proposed programs. The inter-institutional committee was thus at a relative disadvantage as it reviewed all the programs, since few of its members knew of the qualitative differences in the two review systems. It would seem desirable that all of the internal processes should be uniform or made known to the committee.

5. Outside Reviews. There are several variations of the use of outside reviewers in the new program review process. One variation is the "Commission of Scholars" which reviews new programs in Illinois. This committee is composed of seven out-of-state scholars national reputations for their teaching and research. The "Commission of Scholars" is selected by the Board of Higher Education from lists of persons nominated by the institutions. The "Commission's" duties are:

(a) Study areas of critical need for doctoral programs to determine at which institutions they should be offered and how their initiation and sound development may be expedited.

(b) Review applications by any state university to offer a degree program requiring six or more years of education or training. In appropriate cases the board may act without referral of an application to the Commission.

(c) Evaluate the intrinsic merit of the particular proposal.

(d) Determine the need for each program.

(e) Investigate the qualifications of the faculty and physical resources of the institution proposing the program.

(f) Conduct such studies and employ, with the approval of the board, such consultants as are necessary to inform the Commission.

(g) Make a recommendation to the board.

A more frequent variation is the use of smaller informal groups or individuals to review new program requests in a given discipline. In

some instances these consultants are chosen and hired by the institution proposing the program. In other states the consultants are chosen by the state agency staff or the inter-institutional committee. Still other states utilize a combination of state-agency and institutional selection of the consultants.

The use of outside consultants in reviewing new program requests is fairly common whether it exists as part of an institution's internal review and program development process or as part of the state-level program review. The use of consultants was rather highly regarded provided that their selection assured reasonable objectivity. Generally speaking, objectivity can be improved if there are mechanisms in the consultant selection process which provide for joint statewide-institutional or inter-institutional selection of the consultants with all segments concerned having reasonable veto powers. We will say more about consultant selection in the section on the reviews of existing programs.

The only major criticism made on the use of consultants in reviewing new programs was the obvious problem of costs which may be borne by either the institutions or state agency. Generally each consultant is paid at a per diem rate of $100-$200, in addition to travel expenses. Those states which use outside consultants generally find their reviews and advice well worth the costs involved.

We found two instances where there was considerable apprehension over the way in which the reports of the consultants were handled. In both instances some segment was denied access to the consultants' deliberations

(in one state it was the institutions proposing the programs). A more effective approach would allow all parties concerned to have access to appropriate consultants' reports.

6. Board/Commission Staff Review. Like so many other aspects of the state-level review process, that involving the state higher education staff review varies considerably among the states in terms of the extensiveness and quality of the review, and the importance of the review in the overall program review process. A few state agency staffs do not review programs at all. In several other states the staff review is limited to insuring the institutions' compliance to prescribed formats. In still other states such as New York and Washington, the staff review is the primary component of the review process. In New York, the state education department has the final word on proposed program's final registration (i.e., approval). In Washington, the Council on Postsecondary Education staff makes program recommendations to the council. While the staff recommendations are "advisory only" the council nearly always accepts them. A typical description of the elements of the staff review process could include the following elements:

(a) Reviewing and circulating as appropriate, communications of intent to develop new programs, offering advice on program submission and development.

(b) Reviewing new program proposals and circulating them as appropriate.

(c) Reviewing the content of proposed program's documents for compliance with prescribed format.

(d) Verifying the accuracy of data submitted.

(e) Serving as liaison in the selection of consultants to review the proposed program and reviewing the consultants recommendations.

(f) Reviewing the proposed program for content, costs, quality, need, duplication and compliance with the institutional mission and/or statewide plan.

(g) Serving as liaison with inter-institutional committees and/or board committees reviewing the proposed program.

(h) Making recommendations to the state agency board.

(i) Doing follow-ups, such as post-audit review for compliance with conditions prescribed for the programs approval.

While perhaps "typical" in an average sense, the above activities and the extensiveness of those activities varied among the states surveyed.

The length of time generally allotted the staff reviews ranged anywhere from a single day to one or more years. Two to three months was generally adequate for the review of most new program proposals. Periods of time of less than two months were often found to be insufficient for an effective review and those of much more than three months tended to be excessive and in some instances so long that they inhibited necessary academic vitality and program development.

The problems associated with staff review tended to be primarily related to the "qualifications" of the agency's staff which was mentioned earlier. Regardless of the backgrounds and experience of the state agency staff, most institutional personnel felt that the agency staff were not the appropriate persons to review academic programs. This was even true in a state where the agency staff who reviewed programs by major disciplines were on temporary 3-year assignments from those discipline areas from the institutions themselves.

However, this antagonism toward agency staff was not shared by those outside the reviewed institutions or by institutional personnel with some understanding of the wider context within which institutions within a state must operate. State governmental officials who did not approve of the staff reviews were rare. Some institutional personnel while generally agreeing with their institutional colleagues that no outside review would make it easier to initiate new programs, generally saw staff program review as either a "necessary evil" or as desirable in the long run to maintain the vitality of their own institutions. To illustrate, in one state, the faculty senate chairman of a large research institution conceded that while he preferred no outside review, state agency staff review was needed to curb the unnecessary proliferation of programs which tends to dilute state resources and inhibit adequate support of existing quality programs. In a number of states institutional executives stated that it was really a matter of alternatives: either the state higher education agency staff did the reviews or some other less educationally associated group would do them.

A number of other concerns with staff reviews were centered on the way in which individual agency staff persons operated. Staff were berated for wrongly criticizing proposed programs based on incomplete information. If the staff had communicated more effectively with the proposing institution this kind of situation could have been greatly reduced. In one state a new agency staffer's report was highly critical of a particular institution's proposal due to his apparent misunderstanding of the purpose the proposed program was intended to serve. This misunderstanding could have been resolved in a matter of minutes had the

staffer consulted with the appropriate institutional representatives or vice versa. Instead, the report went to the agency's board where considerable animosities were created in a long heated debate over the proposal. The result was not only a wasting of the board's time but the loss of credibility for that staffer's work and the furthering of an adversary climate between the state agency and the institution involved. Unfortunately, some review processes and already existing adversary relations combine to work against a free flow of communication between state agencies and institutions. In one state for example, all communications between the agency staff and the institution proposing a program had to be through an inter-institutional committee resulting in frequently distorted communications.

All of these problems with staff review would suggest the need for well trained and knowledgeable agency staff, with the experience and analytical skills to understand the complexities of statewide coordination. The recruitment and training of such people has long been recognized as an important problem for state agencies. While training programs are being developed by the State Higher Education Executive Officers (SHEEO), the Education Commission of the States (ECS) and others and while beginning salary levels for many state staff have risen, some agencies are still badly wanting in this area. The situation in some states is further complicated by deliberate institutional actions such as lobbying to keep state agency appropriations, staffing and salaries low. In some cases, such lobbying is merely a reflection of the institutions' desperate need for resources; in others it is a deliberate attempt to

impede the effectiveness of the higher education agencies in the hope that the agencies will fail and eventually be eliminated, thus securing a victory for institutional autonomy. Ironically, the few state agencies that have been "eliminated" have been replaced by more powerful agencies that were more regulatory in nature. It appears then that this kind of short-sightedness on the part of the institution's personnel can often lead to even greater losses of autonomy in the long-run.

7. Board Committee Reviews. Another approach utilized in a number of states is a review by a committee of the board (council or commission). This committee may consist of as few as three board members or as many as nine or ten. Further variations include some staff and institutional memberships.

Generally, such committees are regarded as helpful in assisting the full board in its decision-making and in enabling at least some board members to consider in-depth the reviews of new academic programs. This is especially true for boards with extremely long meeting agendas. Associated with this arrangement, however, are potential problems, evident in several states. Some board members, after long periods of service on such a committee, become overconfident of their ability to review programs and tend to take on an expertise of their own, sometimes substituting their own private views for institutional and board staff judgments on programs. In one state a long-time and influential board member on a review committee was instrumental in altering the content of a proposed program in very damaging ways. The program was saved only by the timely reinstatement of its original proposed structure. The institution proposing

the program had accepted the board member's changes because it thought it might be the only way the program would get approved. The agency staff also did not agree with the changes but found it awkward to oppose them vigorously.

In general, the full boards tend to support the recommendations of their colleagues. Notable exceptions to the acceptance of committee recommendations were those situations where the recommendations conflicted with the wishes of institutions with a particularly close relationship to other board members. An instance of this problem was in a state where two board members who were not on the review committee opposed the committee's recommendation to disapprove a proposed program from an institution from which they had graduated.

8. Informal Withdrawal. In many states it is possible for an institution to withdraw a program from formal consideration to "save face," when it believes that the board will reject it. This mechanism of withdrawal serves several purposes including the avoidance of unnecessary conflict at a public session of a board or commission and the option to bring the proposed program back for consideration at a more auspicious time.

9. Review by the State Agency Board. In most states the final element of the new program review process is the action of the state higher education agency board. In some states the board may review new programs only once a year or biennially, associated with the budgeting cycles. In other states the board may review requests for new programs at any of its regular meetings.

The procedures for presenting the proposed new programs to the board vary. A few states let faculty members of the proposing institution make a presentation to the board. In other states the inter-institutional chairman, board committee chairman or board staff may make the presentations. In some instances the consultants may also make presentations to the board. In still other states the presentations may be made by any or all of the above groups.

Developing the appropriate mode for the presentations by various groups is important. In several states where the staff has made a negative recommendation, inappropriate emotional appeals are sometimes made such as the following which was noted by one coordinator:

> ...there has been a tendency of late for the institution affected to have not only those with institution-wide responsibilities appear before the [coordinating board] but the department chairpersons as well. The result has been an emotional personal appeal in which the arguments presented are those which any good department chairperson or faculty would make to their dean but which do not address the issues of greatest concern to a statewide coordinating board. Unless the staff has done an effective job educating [the coordinating board] to the issues and questions involved in the review of academic programs, decisions may be made on fundamentally inappropriate grounds. Unless there is an active process of education of board members to the issues involved in program review they do not feel comfortable making their own independent judgments and feel forced into a position of "taking sides" either with the [coordinating agency] staff or the institution.

This coordinator also raised the important question of "how, in a public forum, does one deal with the question of the qualifications of a faculty to offer graduate work?" These concerns raised in a number of states indicate a need for guidelines for making presentations to the coordinating board and/or for an active educational program for board

members that would better equip them to deal with the issues with which they are frequently confronted in reviewing academic programs.

All of the above approaches had both advantages and disadvantages. The effectiveness of a given process seemed primarily based on providing the appropriate opportunity for all those affected to express orally or in writing their concerns on the proposed program and for those concerns to be at least considered in the deliberations of the board.

Depending on the authority of a given board the action taken may be to approve, disapprove, postpone, recommend, not recommend or a number of intermediate actions dependent upon fulfillment of some condition. In Oklahoma, for example, approval to implement a program may be conditioned upon subsequent funding of the proposed program by the legislature. Sometimes approval of a new program is made contingent upon the elimination of an existing program. Another frequent action is to condition permanent program approval upon a satisfactory post-audit review to see that the program measures up to the purposes for which it was originally proposed. In Louisiana, for example, all degree programs -- associate, baccalaureate, masters, doctorate -- which the Board of Regents deems worthy of implementation are initially given "conditional approval." In the year that a proposed program will graduate its first class, a review of the program is required by the Louisiana Board of Regents. The reviews in Louisiana include the following information: (]) demonstration that requirements of quality education are met in the program; (2) evidence that the submitted need is met by the program; (3) evidence that the program has served the number of students projected in the original application. If a

satisfactory review is not obtained after the first graduation from the program, a second review is required upon the second graduation from the program. Should this second review prove unsatisfactory to the Louisiana Board of Regents, conditional approval is withdrawn and the program is terminated.

In North Carolina, the University System requires that proposals for new programs include "performance goals for proposed programs in terms of projected enrollment, anticipated accreditation, modification of facilities and faculty development -- which form the basis for periodical review of programs after establishment."

III. ANALYSIS OF EXISTING PROGRAM REVIEWS

The review of existing programs is a complex phenomenon. At the present time, a variety of states, for a variety of purposes, in a variety of ways are undertaking such reviews. Approximately twenty state higher education agencies currently review at least some existing programs, and a number of others are developing procedures to review existing programs.

As noted earlier state higher education agency responsibility for review of existing programs varies considerably. For example, one state board with only the power to approve new programs made an extensive study of existing programs apparently with no institutional opposition. Agency authority over subject and type of institution also varies. For example, only New York and Pennsylvania (teacher education programs only) include private institutions in their review of existing programs, the other states are primarily limited to reviewing public institutions. Some states are further limited in their jurisdiction over the public sector. The New Jersey Department of Higher Education has stronger review powers over the state colleges than over the other public institutions. A similar situation prevails in Pennsylvania where the Board of Education has strong powers over state colleges, but has review powers over new teacher education programs in both public and private institutions.

In some cases these reviews are rather limited: they are merely an extension of the agencies' review of new programs, such as the post-audits described in the previous section, or they are studies of only specific kinds of curricula such as the Minnesota Commission on Higher

Education's review of certain health programs offered by public institutions. In other states, such as New York, the reviews of existing programs are rather extensive assessments of the quality of graduate programs in every public and private higher education institution in the state.

The purposes for which state agencies undertake program review of existing programs also differ widely. Some of the purposes for undertaking a review of existing programs are noted below:

1. Financial - to cut back on expenditures. One state estimated it saved $1.5 million on its reviews of existing programs.
2. Efficiency - to enable more effective utilization of existing resources.
3. Accountability - to assure that institutions are effectively meeting state goals.
4. Quality - to up-grade the overall quality of programs by eliminating low quality programs and reallocating the resources to improve others.
5. Consumer Protection - to protect students from programs of questionable value by establishing minimum levels of quality.
6. Political - to demonstrate the clout the agency has over higher education.

The wide variety of practices in the review of existing programs makes generalizations extremely hazardous. What might look like an excellent practice in one state may be questionable practice in another state. Each state must operate within its own environment.

Locating the beginning of a particular state's process of review is often difficult, but one which can contribute to a greater understanding

of the total review process for existing programs. While it is not possible in this volume to trace the background and development of the review process, as it is currently practiced in several states, two examples of its evolution can be instructive. Further analysis of the mechanism for review will follow these examples.

1. New York. The New York State Education Department has conducted two recent reviews of existing programs. In 1969 the department began a review of master's degree programs for the purpose of preparing quidelines and making recommendations to the regents. More recently it has reviewed selected doctoral programs.

Master Degree Review - Intensive planning for the survey began in the summer of 1969 with the development of a twenty-one page form designed to record data that would reflect the character of New York State's master's degree programs. Fifty-six of the eighty-two institutions offering a master's degree in the state were selected for the study to represent a cross section of the state's institutions.

During the academic year 1969-70, information was collected by mail on enrollments; admissions standards; student profiles; curricular content and development; grading; the credentials, experience, assignments of faculty members; and the adequacy of libraries and other facilities for graduate study. Written assessments covering such matters as academic advising, library services, the nature of the courses given in different curricula, and the quality of instruction were obtained from a sampling of students.

Staff members visited all the institutions included in the project. Two

or three persons spent one or two days at each, accumulating additional information, and gathering opinions from administrators, faculty, and students about the nature of the master's degrees offered. A total of 544 curricula, which included 55,602 courses taken, were examined.

In addition, twenty-two of the visits were made by teams responsible for the registration of college and university curricula. About half the members of each team were consultants chosen because of their competence in those fields selected for special attention. During the course of their visits, these teams scrutinized with particular care each institution's methods of providing for the administration, staffing, and support of undergraduate and graduate curricula in the selected fields. Their reports were added to the information derived from other sources; then all relevant material was reviewed by the staff of the Bureau of College Evaluation. While no programs were dropped directly as a result of this review of Master's programs, the review did lead to improved admission procedures and a movement toward performance based programs. A report on this review was prepared in 1972 entitled Master's Degrees in the State of New York 1969-70.

Doctoral Education Review - In January, 1972, the regents announced the appointment of a Regents Commission on Doctoral Education which was given the charge to make recommendations to the regents for developing policy to meet present needs and to guide the future development of doctoral education. The commission was chaired by Robbin W. Fleming, President of the University of Michigan with the balance of the membership consisting of noted scholars from around the country.

The commission had five formal meetings during the year, complemented by individual conferences. At two of these meetings, in the spring and fall of 1972, the commission met with the chief executive officers and other representatives of the state's doctoral granting institutions to discuss the progress of the study and to solicit their observations. In addition, the Regents Advisory Council for Graduate Education, consisting of many of the graduate deans of the state's universities, was kept informed of the study's progress and their observations, too, were sought.

The recommendations of the commission in its final report to the regents included the following:

(a) The regents should regard all the doctoral programs at both the public and private institutions as constituting together an inter-related system for doctoral education.

(b) The regents should have a general policy of concentrating programs at a relatively limited number of institutions in the interest of both highest quality and the most efficient and economical use of limited resources.

(c) The regents should establish special committees to review the quality of and need for doctoral programs in selected disciplinary areas. Only programs meeting standards of present or potential high quality, and need should be offered.

(d) New York State should lend its financial support in both the public and private sectors only to programs meeting the standards of existing or potential high quality and need. Programs without these qualifications should not be supported.

(e) New York State should strengthen its support of all programs that meet the standards of high quality and need.

(f) The regents should sponsor increased cooperation and coordination in doctoral education by the institutions within the state.

(g) The regents should insure that doctoral education at all institutions within the state be accessible to all qualified New York students. Economic and cultural barriers to the realization of this goal should be eliminated.

(h) The regents should require that, as part of the 1974 Statewide Master Plan Progress Report, all the doctoral-granting institutions be required to review their doctoral programs from the point of view of determining anew their purpose, place and need in overall institutional plans.

(i) The Commissioner of Education should end the moratorium on new doctoral programs when ready to implement criteria and procedures that will insure that any new programs fully meet rigorous standards of potential quality and need.

2. Florida.* In 1969, the Board of Regents published a document entitled, Comprehensive Development Plan (CODE) of the State University System of Florida, 1969-1980. The document described "in broad design the current operation of the State University System, sets forth in general terms the future goals of the system, and outlines the policies and procedures to be followed in attaining the stated goals." One such goal was to provide maximum educational opportunities for the citizens of Florida, without unnecessary duplication or proliferation

*This description is drawn largely from a Florida Board of Regents memorandum dated March 8, 1974, entitled "Academic Program Control in the State University System of Florida."

of programs. Since this implied formalized academic program control and coordination, the chancellor delegated the responsibility for developing necessary implementation procedures to the Vice Chancellor for Academic Affairs.

It is important to recognize that the extent to which academic program control is exercised is directly correlated with the financial resources available, student demand, societal needs for individuals with specific competencies and skills, the job market, and faculty aspirations. The priorities established by a single institution within the system for the offering of specific programs may not necessarily coincide with the priorities of the system as a whole. Moreover, the legislature takes into consideration the many and diverse needs of the entire state, and within the framework of available state resources, determines the allocation to the State University System. Only academic program control on a systemwide basis can function with such a statewide perspective.

In 1969, when CODE was first published, program projections were made on the assumption that enrollments would continue to increase in future years at the same rate as in past years. But, since 1969 several unanticipated situations arose. Although enrollments in the system as a whole increased slightly, enrollments in some universities remained the same or decreased. Concurrently, the economic conditions of the state and nation changed, resulting in fewer jobs available in industry, state agencies, and educational institutions for university graduates at all levels. The legislature began to demand accountability for monies expended, effort of faculty and staff, the quality of university programs,

and the employability of university graduates. Correspondingly, the resources appropriated to the State University System by the legislature were less than expected. The University System and its member universities were forced to re-evaluate their entire operations, and in some cases, to modify their respective lists of priorities.

Since 1969, a number of controls had been placed on program development including: a five-year moratorium on new Ph.D. programs; the initiation of procedures for identifying duplicative programs; a policy requiring universities to receive authorization to plan new programs; and the submission of formal proposals for new programs.

In 1972 the Board of Regents took another step, adopting a set of academic program control procedures that targeted for further examination, programs which failed to meet established degree productivity standards. Every year the number of degrees awarded in each program for the previous three years is reviewed. If the number of degrees awarded during the three-year period under review falls below an established minimum number, the program is placed on probation. If the program remains underproductive for three consecutive evaluations, it is then subject to an in-depth study, the results of which will determine whether it should be terminated, absorbed as a track in a broader based program already authorized, or whether the underproductive program can justifiably be continued.

It would be impossible to conduct a thorough investigation of every program every year. The use of degree productivity as a means of identifying programs to be evaluated rests on the assumption that with the exception of professional programs such as medicine and law, degree

productivity is the best single index which correlates meaningfully with enrollments of majors in the program, student demand, job market for graduates and quality of the program. In 1973, 44 graduate programs were identified as underproductive, 16 were placed on probation, and it was recommended that 22 be absorbed as tracks or subspecialties of existing authorized degree programs. The 1974 analysis includes a review of baccalaureate as well as graduate degree productivity. On the basis of the 1974 analysis, it is anticipated that a total of 113 degree programs will be placed on probation. Of this number, 9 are doctoral, 38 are master's, and 66 are baccalaureate degree programs.

Soon after the academic control procedures were implemented, they drew harsh comments from around the system. Faculty and academic administrative criticism of these procedures focused on several aspects of the process: (1) Faculty were most unhappy with a procedure that seemed essentially designed to eliminate degree programs; (2) They were also dissatisfied with what appeared to them to be a quantitative rather than qualitative approach to the review process. Although the regents' staff tried on numerous occasions to explain that degree productivity was a measure used only to identify programs to be studied and that qualitative criteria would be used in all in-depth studies, faculty remained unconvinced and unsupportive; (3) Finally, faculty were aggrieved with the term "programs on probation" used by the Florida press to cite underproductive programs identified by the regents' staff. They felt programs identified in the public mind as "on probation" were unduly stigmatized. As could be expected, the term "programs on

probation" appealed to certain legislators (and perhaps to the lay public) who expressed a growing confidence in regential ability to "prune" the system.

At their June 1975 meeting, the regents, responded to faculty concern by directing staff to develop an alternative to current academic program control procedures. Degree productivity was not to be the only criterion in determining which programs would be studied. A set of procedures has since been designed which stresses evaluation of existing programs, although discontinuance of low priority programs remains one anticipated outcome. The new procedures are expected to be more expensive to operate than the current ones because nonsystem consultants will play a major role in the evaluation. All programs in the State University System will be reviewed periodically. Indicators will be utilized to identify which program clusters merit immediate review.

The examples of New York and Florida are indicative of a planned, rational approach to the establishment of a review process for existing programs. In other states comprehensive review processes were begun or spurred on by economic conditions, such as the massive reduction of a major industry in the state of Washington, or severe fiscal constraints such as those suggested by Governor Patrick Lucey in a letter to the Board of Regents of the University of Wisconsin in January, 1975, in which he stated:

> Specifically, in 1975-77, the University System will need to live substantially within its current year supply and expense budget, and find room for additional productivity savings. Budgets for support services,

> computing services, and instructional supplies will be less than the level of support previously provided. To the extent that larger enrollments come to the University System during the next biennium, additional enrollment funding may not be available.
>
> These circumstances are regrettable. They represent, however, the fiscal stringency facing state government and the state as a whole. More importantly, they also forecast the fact tnat the University System and the state should be planning now to reduce the scope and/or number of its array of higher educational institutions and programs in order to be able to support responsibly the needs of the institutions and programs which are to be maintained.

A. *Programs to be Reviewed*

The selection of existing programs to be reviewed varies considerably from that of reviews of new or expanded programs. The factors which circumscribe the choice include legal limitations on agency authority, functional limitations due to limited staff or resources, and local political considerations of how far a given agency should get involved in the review of existing programs. These limitations are frequently manifested in the reviews being confined to only certain programs (e.g., doctoral or all graduate programs); to certain institutions (e.g., public); or to certain subject areas (e.g., teacher education, which evidences particular difficulty in placement of graduates). Only a few states, such as Kansas, have reviewed undergraduate as well as graduate programs.

Unlike the review of new programs, the actual selection of existing programs for review generally involves the use of a screening process to determine which individual or similar (lateral) programs should be selected for review or, in some cases, selected for more extensive

review. As one agency staffer noted, "Can 300 disciplinary areas in the system (not including all degree levels) be evaluated effectively and efficiently?" While the answer may be yes, most state agencies have attempted to screen all the programs in the system by the use of a single criterion and then to review more extensively the programs identified as particularly troubled. The University of Wisconsin System reviews, for example, distinguish between an audit, which is synonymous with the "screening process" described earlier, and a "review," which is a full scale evaluation of a particular program found wanting in the audit phase. In Wisconsin, all programs are audited, but only a few are actually given a full scale review. Great care needs to be exercised to assure that the programs selected for intensive review are not automatically given a negative label, such as "on probation," in order to avoid demoralizing those involved with the program. This audit and review approach requires as a prerequisite an information system which can identify all programs in the system by a uniform taxonomy which can provide certain minimum information related to the criteria used to screen all the programs. Increasingly, this program information is being further broken down to include information on major and minor tracks within a given degree designation.

There appears to be a real need in many states for specificity in defining programs, concentrations, tracks, majors, minors, subspecialties, etc. Differences in nomenclature and organizational design make it difficult to identify and compare offerings in the same disciplines for different institutions. Information on tracks and minors is important

because it helps to identify possible areas of program expansion, to relate more accurately actual programs with institutional costs, resources, and effort and to overcome the problem of definition which often results in one institution calling its offering a "program" -- thus, making it subject to review -- while another institution calls the same offering a "track." In addition, information on tracks can be valuable as a tool for improving consumer protection. For example, in one state a few institutions with declining enrollments often passed-off to unsuspecting students concentrations within a degree program as programs. The students who subsequently enrolled not only found limited course offerings but also found that their degrees had low marketability.

The development of a functioning definition of programs is universally frustrated, however, by the lack of a detailed and meaningful taxonomy. The most commonly used taxonomy of programs is the Higher Education General Information Survey (HEGIS) developed by the National Center for Higher Education Management Systems (NCHEMS) for the National Center for Education Statistics (NCES). One of HEGIS's shortcomings is its lack of compatibility with Handbook VI, the standard program taxonomy for vocational-technical education. Recently, NCHEMS revised the HEGIS taxonomy to resolve this particular shortcoming, which was particularly distressing for agencies with responsibility for all postsecondary education. But, NCES, the primary user of the HEGIS taxonomy, was dissatisfied with the revised version and decided to develop a whole new taxonomy for all of education (K through post-doctoral).

In the meantime states which are attempting to adopt a common taxonomy for academic programs have two choices: they can use the original or revised HEGIS taxonomy and try to minimize their shortcomings (not the least of which is to relate the taxonomy to existing offerings); or they can attempt to devise their own taxonomy. The State University System of Florida has chosen the latter route and is currently implementing its own taxonomy. The solution to this problem is not easy and must be addressed sooner or later by all agencies attempting to review academic programs.

B. Criteria Used for Existing Program Review

The criteria by which existing programs should be reviewed have been the focus of considerable anguish for many agencies. A recent Task Force on Graduate Education established by the Education Commission of the States (ECS) attempted to address this problem by suggesting that the following factors be considered:

> (1) the number of graduates from the program in each of the last five years; (2) the number of students enrolled in the program (entry and drop-out rates); (3) the size of classes and the cost of courses identified as integral elements in the program; (4) cost per program graduate; (5) faculty workload; (6) program quality as reflected by its regional or national reputation, faculty qualifications and level of position achieved by graduates of the program; (7) total production of a program's graduates from all institutions of the state, region and/or nation; (8) the economies and improvements in quality to be achieved by consolidation and/or elimination of the program; (9) general student interest and demand trends for the program; and (10) the appropriateness of the program to a changed institutional role or mission.

An attempt to ascertain the actual use of these factors by the state higher education agencies is shown in Figure 2. The table indicates the variation between the ECS factors and the factors utilized by many of the agencies.

~~FIGURE 2~~ FIGURE 2

SURVEY COMPARISON WITH ECS TASK FORCES' FACTORS FOR REVIEWING EXISTING PROGRAMS*

State	Degree Level (if designated)	Number of graduates in each of the past five years	Number of students enrolled in the program (entry and dropout rates)	Size of classes and the cost of courses	Cost per program graduate	Faculty work load	Program quality as reflected by its regional or national reputation	Production of graduates from similar programs in the state, region or nation	Economies and improvements in quality to be achieved by consolidation/or elimination	Student interest and demand	Appropriateness to a charged institutional role or mission
Alabama (2)											
Alaska											
Arizona (5)											
Arkansas (2)											
California (2)	All			X(10)							
Colorado (2)											
Connecticut (2)											
Delaware											
Florida	All	X (3 yrs.)									
Georgia (2)											
Hawaii		x	x	x	x	x	x		x	x	x
Idaho (2)											
Illinois (3)		x	x						x	x	x
Indiana (2)											

FIGURE 2 (continued)

State	Degree Level (if designated)	Number of graduates in each of the past five years	Number of students enrolled in the program (entry and dropout rates)	Size of classes and the cost of courses	Cost per program graduate	Faculty work load	Program quality as reflected by its regional or national reputation	Production of graduates from similar programs in the state, region or nation	Economies and improvements in quality to be achieved by consolidation/or elimination	Student interest and demand	Appropriateness to a charged institutional role or mission
Iowa (2)											
Kansas	Graduate Programs	x	x	x	x		x				x
Kentucky (2)											
Louisiana (4)	Graduate Programs	x					x	x		x	
Maine											
Maryland (5)											
Massachusetts (2)											
Michigan (2)											
Minnesota	x		x		x				x	x	x
Mississippi (2)											
Missouri (2)											
Montana (5)											
Nebraska (8)		x	x	x	x		x		x	x	x
Nevada (2)											

FIGURE 2 (continued)

State	Degree Level (if designated)	Number of graduates in each of the past five years	Number of students enrolled in the program (entry and dropout rates)	Size of classes and the cost of courses	Cost per program graduate	Faculty work load	Program quality as reflected by its regional or national reputation	Production of graduates from similar programs in the state, region or nation	Economies and improvements in quality to be achieved by consolidation/or elimination	Student interest and demand	Appropriateness to a charged institutional role or mission
New Hampshire											
New Jersey	Graduate Programs					x	x			x	
New Mexico (2)											
New York	M D		x				x	x	x	x	
North Carolina (2)											
North Dakota (2)											
Ohio	A (only)	x	x								
Oklahoma (2)											
Oregon (7)										x	x
Pennsylvania (2)											
Rhode Island (2)											
South Carolina	Graduate	x									
South Dakota (2)											
Tennessee		x	x		x						

FIGURE 2 (continued)

State	Degree Level (if designated)	Number of graduates in each of the past five years	Number of students enrolled in the program (entry and dropout rates)	Size of classes and the cost of courses	Cost per program graduate	Faculty work load	Program quality as reflected by its regional or national reputation	Production of graduates from similar programs in the state, region or nation	Economies and improvements in quality to be achieved by consolidation/or elimination	Student interest and demand	Appropriateness to a charged institutional role or mission
Texas (2)											
Utah		x	x	x	x		x	x	x	x	x
Vermont (1) (9)	All	x	x		x						x
Virginia	All	x	x								
Washington	All	x									
West Virginia	All	x			x		x				x
Wisconsin	All	x (10 yrs)	x		x		x		x	x	x
Total		15	12	5	9	2	9	3	7	10	10

*The factors indicated for each state are either specifically stated in the material submitted or broadly interpreted to be included in these materials. If no items are x for a given state and there are no explanatory footnotes, it indicates that no information has been received from that state.

(1) The criteria indicated has not been approved and is listed here for information only.
(2) Does not presently have procedures for the review of existing programs.
(3) The criteria indicated are for use with new programs and "specifically identified existing programs." Such a review of existing programs is based on outside evaluations and criteria developed when the program was proposed (if recent).
(4) Louisiana's coordinating agency was recently reorganized and the materials submitted were based on actions by the former agency. It is assumed that the new agency (Board of Regents) will continue and expand on the earlier efforts.
(5) New procedures were approved in October 1975, but were not available for inclusion in this report.
(6) New York criteria is based broadly on two criteria "need and quality."

(7) Oregon's criteria consists of: (1) evidence of need for the program; (2) consistency with state goals and policies and institutional mission and degree of unnecessary duplication.
(8) Information indicated pertains only to the University of Nebraska system.
(9) Vermont State Colleges only.
(10) California has conducted studies of high-cost programs in the past, but, does not now have a systematic procedure for review.

The criteria most frequently used by the various agencies were productivity, cost, quality and need. Productivity was most frequently used to provide an initial screening of the programs. Usually, productivity was expressed in terms of average number of graduates over a certain period of years.

Some states which have emphasized productivity measures have experienced some unexpected negative results, such as a trend toward lowering of admission standards and grading practices in programs of low productivity as faculty attempt to save their programs. In one state the heavy emphasis on productivity resulted in some programs being later identified as "degree mills." A multi-criteria approach was thus identified as the most desirable way to review existing programs. One state coordinator indicated that it made little sense to drop a program of low productivity and leave virtually untouched a program of extraordinarily high cost or low quality. Similar arguments can be advanced for all the other criteria, including quality. For example, it is hard to justify maintaining a program of low demand but high quality while sapping resources from other badly needed programs.

An interesting variation, used in West Virginia, utilizes a system of review which requires forced choices into three categories for each of four variables. Sixty percent of the programs are regarded as normal on any given variable. Twenty percent are placed on either side of the normal range. The variables to be considered are cost, institutional priority, quality and output. Each institution has its own method for establishing the scale and determining the values assigned to each of these variables. Using this procedure each institution selects the programs that should be studied in greater depth.

C. *Processes of Review*

The various states' actual processes of program review differ, but they can be grouped for the purpose of discussion into four general approaches, according to where the brunt of responsibility is located. These four approaches include: (1) institutional oriented review processes; (2) interinstitutional oriented review processes; (3) agency staff oriented review processes; and (4) outside consultant oriented processes.

1. Institutional Oriented. The institutional oriented approach to program review can be of two subtypes. First, many states, such as Nevada, have a state-level agency which is not actually involved in program review but which encourages the institutions or segments under it through various incentives (especially budget) to review their own programs. The majority of states probably fall into this category and it could be argued that this technically does not constitute a state-level review of programs since no one is taking a hard look at the needs of the state as a whole. Second, some state-level agencies coordinate the individual institutional or segmental reviews in a planning process which attempts to provide a statewide assessment of needs. Often the state agencies using this kind of process provide review guidelines and specify dates for their completion. In some cases the agencies may even monitor the institutional review processes to achieve quality and uniformity. The University of Wisconsin System is perhaps a good example. In delegating the task of audit and review to the institutions, the University System administrators sought to recognize that the health of the academic offerings of each institution is a primary responsibility of its faculty. For this reason, each institution was asked to develop

those procedures which it judged most appropriate to its form of governance, and most likely to accomplish the goals established. The involvement of the central administration in the process is limited to the distribution of the general guidelines, the monitoring of the process, the receipt of campus reports, and the dissemination to other campuses of particularly effective review practices.

This approach is probably the least objectionable to the individual institution as it allows a great deal of institutional individualization: the University of Wisconsin at Madison utilized a technique which emphasized the use of internal committees, whereas the University of Wisconsin at Milwaukee utilized a technique which emphasized the use of outside consultants.

Strict adherance to this approach does have the disadvantage of not being able to undertake lateral reviews of programs. Thus, if there were an unnecessary duplication of a given type of program in the various institutions, a strictly institutional review would have to rely on institutional initiative to eliminate it. At a minimum the state agencies relying on institutional reviews would need to conduct periodic lateral reviews and develop mechanisms for balancing the needs of the state.

2. Inter-institutional Review. An inter-institutional review committee is a common component of the review process in a number of states. In some instances the committee serves the minimal function of assisting the development of the guidelines and criteria. In others, it may, in addition, play an important continuing role in the review process itself. Perhaps typical of the latter approach is that utilized in Kansas where the Council of Chief Academic Officers (COCAO) plays a continuing role in reviewing, evaluating and coordinating program

development at the Regents' institutions. COCAO, under the direction of the Council of Presidents, also jointly reviews all graduate programs on an annual basis. Programs are flagged for further study if the average degree productivity falls below cooperatively established minimums. These programs are then singly reviewed and, when warranted, are placed on a provisional status. If, at the end of three years, productivity has not improved and no exceptional circumstances are involved, the program is recommended for discontinuance. The academic officer of the Board of Regents serves as an ex officio member of COCAO and on occasion may issue through the executive director a separate opinion regarding the programs under review.

The inter-institutional approach to reviewing existing programs has a number of advantages not the least of which is the cooperative involvement of the institutional staffs. Two states which responded to a Carnegie Council survey reported that they had started out using only staff analysis but soon found that institutions cast as passive victims of the review would appeal negative recommendations on both procedural and substantive grounds, and sometimes won board reversal of staff findings.

Like inter-institutional committees for new program reviews, described on pages 41-44, inter-institutional committees for existing programs reviews pose such potential dangers as trade-offs, logrolling and factionalism. These problems can be reduced somewhat by the representation of appropriate state-level agency staff and the provision of training for committee members.

3. Agency Staff Reviews. In some states the agency staff have primary or even exclusive responsibility for the review of existing programs. In Washington, for example, the staff of the Council on

Postsecondary Education in Phase I of its review process identified programs evidencing historical patterns of low productivity. The institutions responsible for these programs were then asked to complete program review statements and make recommendations to the council justifying either continuance or termination. Specific program recommendations were then developed by the council staff which indicated one of four possible actions: program termination; program continuance on a provisional basis; the program continuance with further study; or program continuance on an unqualified basis.

Of the 126 programs reviewed, 50 were recommended for termination, 35 were recommended for continued offering on a provisional basis, and 37 were recommended for continuation on an unqualified basis.

A second phase of the Washington review process is now underway which involves a review of duplicate graduate programs.

Staff reviews, if undertaken by senior staff with great sensitivity and judgment, such as those undertaken in Washington received little criticism. However, when such reviews are undertaken by persons of questionable maturity and training they could result in great harm to established academic programs and could lead to major confrontations with the institutions with long-term negative consequences for both the institutions and the agency involved. Agency staffers with real or perceived "axes to grind" should not be given responsibility for program review as was unfortunately the case in one state we visited.

4. Consultant Reviews. A few states, in particular New York and Louisiana, rely on the consultant review process. In the previous

section on the review of new programs we noted the Illinois "Commission of Scholars." This group of seven persons, who cannot be residents of Illinois, is also responsible for reviewing (post-audit) six Doctor of Arts programs following an experimental period of five years.

The consultants in New York are selected as follows:

1. Names of distinguished out-of-state scholars to review the programs in the state are solicited from all the institutions involved, national professional associations, and the Doctoral Council.* A pool of consultants is developed from these names. Each academic department to be evaluated is asked to review the list and cross out anyone who would not be approved as a consultant.

2. Three of the five members of the rating committee in each discipline are appointed by the commissioner from the pool of consultants. Recommendations for membership are made by the Doctoral Council and the involved institutions. This group meets to review all background material and assign consultants for individual campus visits. The members also suggest additional specific questions for site visitors to particular programs. The remaining two members of each rating committee are appointed later from the site visitors.

3. Approved consultants are then scheduled for campus visits and sent the background material for study. The background material is supplied by the involved institution in response to the questionnaire.

4. A team of two or three consultants makes a site visit and the chairman prepares a draft report in accordance with guidelines provided by the education department.

The use of outside consultants is generally regarded as a desirable way of reviewing the quality of academic programs. Faculty especially feel that peer review is the only meaningful way to review the quality of academic programs. This is not to say, however, that problems are not involved in the use of consultants. The four problems we identified were: cost, selection, effective use and perspective.

*The "Doctoral Council" is composed of graduate deans and academic Vice Presidents from various institutions in the state.

First, problems related to the cost of consultants are obvious -- if good people are selected, if they all come from out-of-state, and if they put in a considerable amount of time, their cost is going to be high. The second problem with selection consultants is probably also obvious especially to those who have had extensive experience with consultants. It is possible to select consultants who will promote any conceivable perspective that is sought. For example, in one state an institutional representative admitted that he frequently hires consultants to review programs from "lesser institutions" who would be awed by the faculty, resources and facilities and thus write a favorable report. On the other hand, the opposite result could be obtained from hiring consultants from "better institutions" to review programs. Needless to say, there needs to be a fair and consistent consultant selection process.

Third, the use to which consultants are put can be problematic. In one state consultants were hired to review certain programs but due to restrictions on their time, they were forced to do a "motel room study" based on data collected by the coordinating agency. They neither could visit the campuses nor hear institutional perspectives. As a result their report was somewhat discredited.

Out-of-state consultants can also lack a broader perspective for state-wide planning. For example, some New York institutional representatives criticized the rating teams for lacking concern for matters of geographic access to doctoral programs and for being entrenched traditionalists who failed to see a value in serving the needs of part-time urban populations.

While the above generalizations are useful for a general discussion of the various review mechanisms, it should be noted that it is a rare state which entirely fits into one of these four types. Most states employ some combination of the four processes. In order to provide a perspective on this mix of types we have developed several matrices (see Figure 3) which along one dimension show the various types of roles and on the other dimension shows the degree of involvement of selected states. As can be seen in these matrices, there is a wide variety of responsibility among participants within a state and between constituents in other state agencies.

FIGURE 3

RESPONSIBILITY FOR REVIEW OF EXISTING PROGRAMS

Degree of Responsibility Matrix

New York

Type of Reviewer	None	Modest	Shared	Primary	Exclusive
(1) Institutional		x			
(2) Consultants (outside)				x	
(3) Agency Staff			x		
(4) Inter-institutional		x			

Washington

Type of Reviewer	None	Modest	Shared	Primary	Exclusive
(1) Institutional			x		
(2) Consultants (outside)	x				
(3) Agency Staff				x	
(4) Inter-institutional	x				

Kansas

Type of Reviewer	None	Modest	Shared	Primary	Exclusive
(1) Institutional		x			
(2) Consultants		x			
(3) Agency Staff			x		
(4) Inter-institutional			x		

Wisconsin

Type of Reviewer	None	Modest	Shared	Primary	Exclusive
(1) Institutional				x	
(2) Consultants (outside)		x			
(3) Agency Staff		x			
(4) Inter-institutional	x				

Florida

Type of Reviewer	None	Modest	Shared	Primary	Exclusive
(1) Institutional		X			
(2) Consultants		X			
(3) Agency Staff				X	
(4) Inter-institutional			x		

IV. ANALYSIS OF MAJOR PROBLEMS

A. *Costs and Benefits of Program Review*

We know of no studies which have carefully examined the costs and benefits of program review. In their absence, there is no small amount of controversy concerning both the alleged costs of program review and its alleged benefits.

Most state agency staffers are very cautious about giving the impression that program review for new and/or existing programs can be easily translated into dollar savings. In fact, many assert that program review may not result in any savings at all. For example, several programs actually terminated as a direct result of the review of existing programs were merely paper changes. Frequently, these were low productivity programs serviced by faculty in a related area so that the dropping of a specific degree designation would result in merely reducing the former degree program to a major or track within another broader program. The dollar savings, if any, would be quite minimal since no reduction in staff or resources allocated would accompany the change. As Lyman Glenny has noted:

> Eliminating a program could mean discontinuing a degree in the subject and, thus, steering students into some other degree program; it could mean discontinuing not only the program but all the courses of which the program is composed; or it could mean dropping faculty members who teach the core courses of the program.
>
> Of those options, only dropping faculty members, reducing their perquisites, or increasing their teaching loads will save the institution substantial amounts of money. If a program is eliminated, but not the courses composing it, then faculty members must be retained to teach the courses. Moreover, if the degree is no longer offered but the courses are kept, they may decline in enrollment, increasing the unit costs and

> the costs of the programs for which the courses remain essential. If the courses are eliminated along with the program but the faculty members are retained in some other teaching or administrative capacity, no real savings are likely to occur.[44]

In some states, especially those in which program reduction was directly linked by funding mechanisms to staff and resource reduction, dollar savings can be calculated. The Washington State Council has estimated that savings of $1.5 million have resulted from its reviews of existing programs. The Minnesota Council on Higher Education estimated in 1974 that its review of new programs altered developments which currently "save" the state more than $3 million annually. Other states asserted that program reviews resulted in "deferred cost savings," as additional resources were not added to programs discontinued or not approved.

Those considering implementing a program review process with the intention of saving money and reducing costs should be aware that program review itself costs money. New York estimated that its outside consultants alone in its review of doctoral programs cost about $30,000 per discipline annually. If institutional and agency expenses were added, the total costs would be extensive indeed.

However, any assessment of cost-benefit ratios in the program review process must include a broader definition of benefits than merely the funds presumably saved through new program denial or existing program elimination. Other benefits are: the institution's establishing a high quality program review process and engaging in serious self-evaluation; the institution's finding a source of funds for reallocation to priority programs in a time of shrinking resources; the students being assured that program quality is being seriously evaluated; and state

officials' and the general public is being made aware that the institutions and the statewide board can hold themselves accountable.

Surely, when these broader possible values are taken into consideration, even expensive program review processes would seem justified. An illustration of the value to institutions of a program review done by outside consultants is offered by the comments of a provost of an eastern university:

> This is a reflection upon the dynamic rather than static nature of the review process as it occurs. As in therapy, which in certain respects the review process resembles more than a judicial process, the review procedure changes the attitudes of participants as they go through it. This is true not only within each faculty member's own department, but for the campus as a whole. It may be observed that within a department, for example, there is a predictable anxiety cycle of apprehension before the reviewer's arrival, involvement during the visit, relief that things proceed satisfactorily, then mild apprehension prior to receipt of the reviewer's report (mild because the reviewer is shown on campus to be less than an ogre, and also because the faculty member has observed certain weaknesses in the reviewer which will allow discounting of any terribly threatening criticisms which may be made), and so on. This is of course understandable. But, more importantly, the campus in general is affected by the communal experience of the reviews, and, as the reviews proceed, there is a tendency to become more involved in self-criticism, or at least to become more open to the possibility of criticism. This, I would think, is quite significant as a precondition for any ongoing self-assessment plans.
>
> Our experience with the reviews encourages me to think that it is possible, even in an institution with a strong tradition of faculty distrust of administrators, both to have a successful series of assessments at a finite point, and to intensify receptivity for ongoing self-assessment. We achieved a good deal immediately. Positions were eliminated and reallocated with communal assent. New needs were located, some of which were satisfied in the following year's budget. But even more significant was the attempt to create a new mood. Despite the seeming threat to the faculty, the review process can ultimately reinforce the faculty by focusing so centrally upon it. Seldom is the college faculty member the subject of such intensive professional scrutiny, except during tenure

> reviews. Rarely does the campus faculty as a whole go through a common professional experience. If the process of scrutiny is potentially supporting as well as potentially threatening, and if the faculty becomes self-critically a participant in the process, then the base for continual self-assessment should have been established.

Assuming, then, that the program review process has been judged worthwhile, what are some typical problems revealed by our research?

B. *Due Process*

First and foremost is the development of a process that genuinely involves the institutions. This means more than merely allowed them an opportunity to appeal an unfavorable state board decision at the conclusion of the review. It ideally includes institutional participation in the very design of the process, in the determination of the guidelines and procedures, in the selection of outside consultants (if any are used) and in the deliberations of an inter-institutional advisory committee.

Such institutional participation is, of course, purchased at a price, but the possible delays and informed opposition to state board efforts are well worth it. Several agencies' initial attempts to get quick program review results by largely by-passing institutional participation proved to be failures because the institutions presented such effective opposition.

It is also important to realize that responding to institutional concerns by creating an inter-institutional advisory committee is only the first step toward meeting the problem. We have discussed earlier the various dangers with runaway committees, log rolling, have-nots ganging up on the haves, etc.; particularly in the early months of a new committee, a disproportionate investment of senior staff time has to be devoted to educating this crucial body about its proper role. On the one hand,

the staff must see that centrifugal forces do not come to dominate its deliberations; on the other hand, the staff must be hypersensitive to the danger that either in reality or in appearance, the advisory committee is not viewed as the "lap dog" of the central staff. Realizing the dangers either way, we urge serious consideration of the possibility that some institutional representative and not a member of the central staff chair the meetings.

Sunshine laws are now opening up many formerly secret deliberative processes in state government, so the increasing pressure for performing in public may come as no great surprise. Nevertheless, the program review process -- particularly as it is applied to existing programs -- is one so sensitive that several states reported major efforts to reconcile openness of process with sensitivity and discretion.

An example of this last problem was related by one state which experienced severe legislative pressures for the statewide board to display tough-minded program results. A dilemma arose when two institutions preferring to switch rather than fight requested the opportunity to withdraw some proposed new programs rather than have them formally rejected in open session. While the substantive results would have been the same in either case, the state board had to choose whether it was more important to please the legislature or to save the institutions some embarrassment.

C. Staff Qualifications

Statewide boards obviously want qualified staff throughout their agencies, but nowhere is the need for it more crucial than in program evaluation.

Here it is essential that board staff have some significant prior experience in academe -- preferably including teaching experience. The review of new and particularly of existing programs necessarily involves nuanced judgments based on a sound knowledge of academic values. We heard considerable criticism from the institutions that in too many instances board staff lacked sophistication and made questionable recommendations based on simplistic treatment of data.

A lesser opposite danger we heard only once was that program review staff too steeped in academic values and experience might lack adequate appreciation of the need to give the public interest priority over institutional interests.

Staff members working with any inter-institutional advisory committee will be under especially heavy pressure. On the one hand, their academic credentials must be impeccable; but on the other, they must work conscientiously to see that the committee does not engage in trade-offs which protect the institutions instead of the public.

D. *Need for Multiple Criteria, Flexibly Applied*

The mechanistic application of any single criterion in the program review process inevitably results in problems. Most frequently, an over-emphasis on productivity caused the dilution of quality in programs identified as possibly underproductive. Lowered admissions standards and easier grading practices were sometimes resorted to in order to improve a program's numerical productivity. This overemphasis would make such questions pertinent: "Does it make much sense to drop a good program for low productivity and at the same time leave a program bordering on being of 'degree mill' standard untouched?"

The National Board on Graduate Education (NBGE) in its report Doctorate Manpower Forecasts and Policy (November, 1973) has also expressed its concern over the use of single measures and simplistic formulas in a series of guidelines for states to follow in reviewing programs:

1. A single measure of quality should not be applied to very diverse programs -- programs that may be serving the needs of nontraditional forms of graduate education. Multiple indicators of quality, sensibly related to different program missions, should be developed.

2. Statewide planners should resist the temptation to apply simplistic formulas to doctoral programs, such as "eliminate any program that has not produced more than two doctorates within the last two years." Such statistical measures may flag programs in need of review, but no program should be eliminated on the basis of simple statistics alone.

3. When evaluating graduate programs, planners should not attempt state-by-state labor market analysis, since the mobility of the highly educated is certain to confound such analyses. A more appropriate criterion, we believe is assured access to graduate education for residents within the state (or within the region, through reciprocal programs).[45]

These arguments for multiple measures are further buttressed by a two-year study conducted by the Educational Testing Service, entitled Assessing Dimensions of Quality in Doctoral Education: A Technical Report of a National Study in Three Fields (1976). The study noted that judgments of quality based upon many indicators had four major advantages over less comprehensive data. It particularly stressed the importance of flexibility, which implies the opportunity to deviate from the normal program review process in exceptional circumstances in recognition of some special or unique situation. In one state, for example, a proposed nonstate funded program was lost due to the absence of flexibility in the schedule for reviewing new program requests.

E. Special Problems in Measuring Program Quality

Most state agencies do not even purport to examine qualitative factors in their program review process. The Virginia State Council on Higher Education, for example, makes a point of noting that its review is a quantitative one and that the qualitative review is the responsibility of the institutions. Other states, such as Florida, mention quantitatively oriented reviews from which indicators of quality can only be gleaned New York's review process on the other hand, has as its major purpose the qualitative assessment of academic programs.

Quality, however, is an elusive element which is most difficult to measure. Like the question of what makes an artwork beautiful, quality is often a relative matter depending upon who is viewing it. The only general agreement we found was that quantitative measures were deemed only remotely, if at all, related to quality; and peer judgment was the only consistently reliable measure of quality. For these reasons the New York State Department of Education chose out-of-state peer consultants as a major component of its qualitative review of academic programs.

But outside consultants are not without their problems. For one thing they normally lack an intimate knowledge of inter-institutional relationships and the general statewide context. Yet isolated judgments of program quality really need to be linked to broader policy considerations, which points to the importance of the relations between outside consultants and the staff which provides orientation for their efforts and of any statewide institutional advisory committee which will be reviewing their report. During the pilot runs of the New York doctoral

program review, there were a few comments to the effect that both the State Education Department staff and the Doctoral Council reviewing the rating committee recommendations were perhaps too much in awe of the academic "stars" who had been used as consultants. As a consequence, one team was allowed to disregard guidelines urging attention to teaching excellence as well as other factors; it focused exclusively on traditional measures of quality: two books published per faculty member, faculty depth in most major fields, appropriate library facilities and full-time graduate students. This resulted in a recommendation to terminate a program at an urban university which claimed that it was achieving a statewide goal of broadened access by serving a part-time urban population.

There were also statewide ramifications to an initial rating team's recommendations for termination of programs in other parts of the state, a few of which were reversed, some critics said that the original verdicts showed little concern for matters of geographic access to doctoral programs for students in upstate New York.

Another example of the need to keep the high powered consultants' enthusiasms under control was in another reversed early finding to approve most parts of a doctoral program, but to recommend phasing out of some specializations. Such selective fine-tuning was considered excessive state intervention and subsequent rating team findings were confined to recommendations for departments as a whole.

One should, on the other hand, note that there was widespread praise for many aspects of the New York program. The quality of the consultants

was deemed high. The State Education Department's soliciting the help of the institutions to form the 50-60 member consultant panels for each subject was appreciated; as was the power given to each chairman of a department about to be reviewed to veto from the panel the names of persons he considered undesirable as site visitors. Furthermore, later subject evaluations in New York provided evidence that many of the early problems in the use of outside consultants were being solved.

The assessment of quality by state-level agencies may be significantly enhanced as a result of the work undertaken by the Educational Testing Service (ETS) in the study noted earlier (Clark, Mary Jo, 1976). The study clearly demonstrated that the opinions and perceptions of program participants and recent graduates were relatively easy to collect and use in constructing index scores for various aspects of graduate programs. Furthermore, these measures were found to have reasonably high levels of reliability and validity. ETS summarized all the data for each program before comparing programs within each discipline and then used the data in several different ways to assess some 30 aspects of graduate programs. From these means, ETS selected 23 indicators to profile the programs in each discipline. The resulting profiles were then used to compare similar departments.

F. Legal Problems

Although not widespread, legal challenges to state board program review powers can raise certain difficulties -- if only to delay decisions and increase costs. To our knowledge, the only instance thus far in which such a challenge has been mounted is in New York where the State

University took the commissioner of education to court, claiming that the authority of the Board of Regents did not extend to terminating doctoral programs through a review process. Both the original and the appellate state courts, however, have found for the regents and their powers of program review now seem established. New York regents atypically also possess program review powers over private higher education and have, in fact, acted to terminate some doctoral programs at private institutions. Far from opposing such action, the Commission on Independent Colleges and Universities in New York filed a friend of the court brief in the above-cited case, supporting the powers of the Board of Regents!

While New York State may now be unique in giving its Board of Regents such sweeping powers over the private sector, we can see the possibility that pressures will be brought to bear to extend such powers over the private sector to agencies in other states. Approximately 44 states now have programs giving state aid directly or indirectly to private institutions within their borders, and as some private institutions in deep financial trouble stagger close to the edge, they and their supporters will be asking the state for emergency bail-outs. It is highly likely that public institutions will resent their own programs being recommended for termination while related programs of perhaps similar quality at private institutions receive substantial state subsidies and are exempt. Such private institutions had best not assume that state monies can be acquired in any significant amounts without their surrendering sizable amounts of institutional sovereignty.

Finally, we should mention the possible emergence of legal issues cutting

across program terminations and collective bargaining in higher education. Again, no one has yet drawn our attention to specific instances, but it is not hard to anticipate that if program terminations become more common and result in faculty dismissals or reassignments, negotiating agendas will not be far behind. Law suits from faculty unions may then become more common against state program reviews than from institutional governing boards. This leads us to our last area of analysis.

G. *Political Problems*

While some presidents and trustees are genuinely upset over what they regard as excessive state intrusion into the heart of Academe through the program review process, the true level of distress cannot always be assessed by public rhetoric. Some institutional protest is more "for the record" than for real. A few institutional presidents privately admit that because of their relations with faculty, students, trustees and alumni, they are forced to take public positions critical of a program discontinuation process, whereas in fact they very much welcome some external leverage to help them crack open entrenched internal positions. It is difficult, then, to interpret just how strong the opposition to state board reviews really is.

Political problems of another kind arise when influential personalities on the board or in state government subordinate the alleged rationality of the program review process to other considerations of a more partisan nature. Such political intrusions play havoc with state board attempts to construct a credible program review process and tend to make institutions very cynical about the value of the effort.

One example is an inter-institutional committee in reviewing competing institutional requests for a new doctoral program labored long and hard to come up with an equitable decision on which institution should get the program. The committee, after six months, came to a most difficult decision. It was an agonizing process that literally almost tore the committee apart. When the committee finally made its recommendation to the board, the board for entirely "political" reasons related to one influential board member's local constituency reversed the decision of the committee resulting in its total demoralization. As one committee member put it, "We will never try to do a conscientious job again. If a similar situation arises, we will approve both programs even it we know that we only need one in the state."

Another example, comes from another state in the 1960's where log-rolling had resulted in a number of campuses being located in various areas in the state. By almost anyone's rational planning, the campuses would not have been located where they were, but the situation was semiacceptable during a period of rapid growth and almost unlimited allocations to higher education. The current situation, however, is much different: appropriations have not been keeping up with the times and there is a need to cut back on programs. One campus with only a few hundred students should by most persons' perceptions be closed; however, legislative action prompted by an influential legislator from the affected area prevents its closure and program terminations were therefore more necessary on other campuses than they really needed to be.

These examples are illustrative of problems we encountered in many states. Ironically, some of the self-interested legislators and board members

are the ones who loudly scold educators for not being "efficient." Given the grim prospects for future resources and the likelihood of declining enrollments governmental officials and board members ought to practice self-restraint and realize that postsecondary education effectiveness begins with them. Politics is inevitable in the domain of state budgeting for higher education; democrats with a small "d" would not have it otherwise. But we urge that partisan politics (in contrast to legitimate public policy issues) is not congenial to the health of academic programs in higher education, and in our last chapter we will try to spell out why we think the statewide board has a unique and crucial role to play in persuading the public and state officials that the public interest is being served by the program review process.

V. RECOMMENDATIONS: WHO SHOULD BELL THE CAT?

In this chapter we go beyond analysis to prescription, offering as part of a necessary on-going debate, our own views on how state-level review of academic programs in higher education "ought" to be done.

We will first summarize and then elaborate on our principal arguments:

1. More important than any particular set of structures or functions is the spirit in which the program review is carried out. If it is seen as a process which any self-respecting institution, even a healthy and wealthy one, ought to undertake for purposes of self-renewal, rather than as merely a negative reaction to fiscal austerity and/or enrollment declines, then some of the threatening trauma may be lessened or even averted.

2. Because such traumas normally involve endangered academic programs, it is indispensable, though exceedingly difficult, to involve faculty in the processes. On the other hand, for a variety of reasons which will be spelled out below, a faculty or even an institutional perspective by itself is not sufficient. We propose, therefore, a state-institutional partnership for review of academic programs.

3. A variety of actors at the state level are potentially relevant to program review. We discuss the benefits and shortcomings of different officials' participation, and then propose a central role for the state-wide coordinating or governing board, recognizing, however, the considerable difficulties involved in a successful statewide board operation.

A. The Purposes of Program Review: Retrenchment or Renewal?

Even though problems in the process pop up even today, the need for both institutional and state-level review of proposed new academic programs is clearly recognized. After all, institutional priorities must be examined; institutional potential for mounting a high quality new program must be assessed; state (and perhaps regional and national) needs must be evaluated; and a state's ability and willingness to finance new ventures in higher education over and against competing priorities must be determined. Sensitive and complex procedures are involved, but by and large most states have developed some degree of effective cooperation and achieved some measure of success in the monitoring process.

The review of existing programs is far more problematic, however, with few states yet having fashioned a fully satisfactory set of procedures. Neither the institutional nor the state role has really come into focus. Indeed, our exhortation to "think in positive terms" may seem like whistling by the graveyard, since undeniably the process has arisen in reaction to state fiscal austerity and/or significant enrollment declines.

First, let us establish its legitimacy as a response to these negative pressures; then we will try to argue the virtues of this new necessity. In both of these arguments, we draw heavily upon the writing of one of the more sensitive and articulate practitioners of the art, Donald K. Smith, senior vice president for academic affairs, of the University of Wisconsin System.

Bowen and Glenny[46] have pointed out that the first reaction of most

administrators studied in their sample, when faced with state demands for immediate cutbacks in institutional budgets, was to cut across-the-board in all programs. This technique had the obvious advantage of being both quick and politically less controversial in the short run.[47] However, over a longer period of time, most of the systems involved converted to some form of selective cuts, recognizing as Smith argues that treating all units in the same fashion:

> . . . speaks to an inevitable weakening of the fabric of the university as a whole . . . . the obligation of the university (is) to search out those programs or activities which, however valued, are less essential to its strength and nature than others, and to abandon or alter that which is of lower priority to protect the vitality of that which remains.[48]

Smith is not unaware of the difficulty of moving a university in this direction. He urges:

> . . . the institutional processes of audit and review . . . be perceived as an integral part of institutional mid-range and long-range planning, rather than a crisis reaction to fiscal stringency. This principle is vital if we are to assume that the faculty will internalize responsibility in their decision-making for continuous re-examination of academic programs. A process aimed simply at program excision will never take root in the habit system of universities. A process aimed at maintaining the health and vitality of the institution, whether the fiscal environment is fair or foul, can take root.[49]

Later, we will suggest how mid- and long-range institutional planning can be linked and how state planning can complement institutional efforts. We would stress, above all, that incentives, not sanctions, be used.

B. *Faculty Participation in Program Review: An Indispensable But Not Sufficient Condition*

Again we take a lead from Smith:

> . . . the indispensable condition of a genuine university is that its faculty assume primary responsibility for the quality, health, and usefulness of its academic programs.

> If this is not done, then the reason for being a community of scholars with general responsibility for the recovery, organization, dissemination, and enhancement of knowledge is abandoned. Public universities become simply another agency of the state or society organized to carry out service functions identified by government or the public generally. Agencies external to the faculty may conceivably produce quicker decisions on program excision, attenuation or alteration than can the faculty, but the price for such a choice is inevitably both demoralization of the academic community, and the withdrawal of that community into a posture of defending all that now exists rather than attending to the health and quality of all that exists.[50]

Based on his preliminary experience in Wisconsin, where the governor had confronted the University System with severe fiscal stringency, Smith was optimistic about a faculty's ability to face and make hard decisions. Nevertheless, he found three reasons -- and we can add several more -- why even conscientious faculty program assessment may not be enough.

For one thing, "lateral audits" -- that is, the evaluation of the same academic program in all (public) institutions in the state at the same time -- are occasionally required. While lateral audits should still involve faculty participation, such participation must clearly occur in a broader context where the ultimate authority resides above the campus level. While logic suggests the desirability of lateral audits in all possible cases, their use conflicts with the competing values of local initiative and faculty participation.

Unilateral campus actions must also be circumscribed when the recommended dismantlement of a given program could have serious statewide or regional consequences, or when basic institutional mission, as set forth in state planning, might be affected. For example, an institutional decision to terminate the only School of Forestry in the region, or to abandon lower division instruction, would necessarily require a state-level determination.

Other, more subtle reasons suggest the need for some degree of state-level action in review of academic programs. In the first place, the quality of faculty participation and administrative leadership across institutions and systems is very uneven. This means that, within a given state, the statewide board might have three different roles: a light-handed monitoring of institutions which have established high quality procedures; a full laying on of hands for those institutions with no internal procedures of their own; and moderate intervention for those institutions which have only mediocre program review procedures.

In the second place, the keeper of the times would suggest a role for state-level participation. Given the apparent increase in public disillusionment with higher education and the indisputable increase in pressures for more public accountability, the "credibility" issue is unavoidable: even if institutions are implementing high quality program reviews, it is likely that state officials will demand that organs external to the system undertake a separate review process to authenticate the internal review. "Justice must not only be done; it must be seen to be done."

C. *The Search for Objectivity: Who Should Bell the Cat?*

Since the focus of this study has been on the role of the statewide coordinating or governing agencies, it should come as no surprise that we feel these agencies ought to play a major role in the program review process. But what of other actors "external" to the institutions who have a role to play? For example, Smith observed in Wisconsin that a consortium of four neighboring universities had responsibility for audit and review of graduate programs replicated in more than one of its member

universities, and for review of new programs proposed by any of the four. Although the consortium decisions are not legally binding, Smith reports that recommendations thus far have proved "unusually persuasive." But, two problems with this kind of consortium are obvious: while its horizons are broader than a single institution, they are still not statewide; and, to some skeptical state officer eyes, consortia based on voluntary institutional membership will never get too rough on their own members.

Some of the same cynicism applies to two other possible external actors whose broader horizons answer the concern about statewide dimension: both regional accrediting associations and interstate compact associations (such as the Southern Regional Education Board) transcend state boundaries, but both kinds of organizations depend for their success on the general maintenance of institutional good will and support. Thus, while regional accrediting associations have been known to make harsh judgments about the quality of specific programs, these judgments are normally transmitted privately to the institutions in question, and the public may never learn of them. Similarly, while the regional compact associations may play a leadership role in coordinating the development of a special program area, such as veterinary medicine in the South, these organizations are not staffed to undertake comprehensive program evaluations. Politically, they probably would not want to assume this role even if they were adequately funded to do so.

When we turn to the executive and legislative organs of state government, both the canons of objectivity and statewide perspective are satisfied. Their weakness, however, is in their general lack of familiarity with the nuances of academic life and values. Particularly in the sensitive area

of evaluating the quality of academic programs is it necessary to know the strengths and weaknesses of academic peer review. The intervention of either brand of state government into higher education presents additional problems. The executive branch is preoccupied with state budgeting, and the budgeting cycle lends itself very poorly to any kind of in-depth program evaluations, especially those in higher education where we as yet know so little about how to measure outcomes, quantitative and qualitative. Marvin Peterson, John Folger and ourselves, in a forthcoming monograph, will review the efforts of two states to move to some form of performance budgeting,[51] but there seems little in common between such proposed executive staff activities and the kinds of program review we discuss here.

Legislative program evaluation, on the other hand, can embrace intensive, selective program reviews. While few legislative targets have thus far been higher education programs, nothing in principle prevents such machinery from being aimed at the heart of academe. Even then, if the so-called program evaluation focuses on a systemwide management audit and avoids evaluation of the details of individual academic programs, a complementary division of labor may be achieved in the program review field. Serious questions would arise, however, should state legislative auditors begin to turn their sights on discrete academic programs; legislative staffs would not seem to have the appropriate ability or orientation to handle this, and problems of overlap with the statewide boards in higher education would be inevitable.

In theory, statewide boards are well placed to complement institutional/faculty efforts in review of academic programs. In practice, three

different problems have occurred. In the first place, some statewide boards may have to be persuaded to change their operational priorities from a preoccupation with quantitative analysis of higher education budgets to a deeper involvement with the assessment of program quality, particularly as it relates to existing academic programs. Glenny's recent massive study of state budgeting for higher education emphasized the need for most coordinating boards to shift their priorities from technical budget reviews and move toward doing more long-range planning, program reviews (both new and old), development of information systems and budget formulas, and certain, limited budget evaluations.[52] Glenny found that executive and legislative staffs were becoming increasingly occupied with doing technical budget reviews and were less and less willing to defer to statewide board budget recommendations. While some signs indicate executive and legislative staff involvement with program evaluation, this development is in its infancy, and the statewide boards have advantages herein which should permit them a more distinctive role.

However, a second problem emerges around the issue of institutional cooperation. Based on past performances, institutions, instead of sensing that they are dealing with the lesser of evils, may actively or passively resist board initiatives in program review; and without such cooperation, the board's efforts may fail.

Finally, if, by some miracle, both the statewide board and the institutions in a given state are ready to cooperate, it remains to be seen whether the program-oriented staff in the executive and legislative branches will agree to stay out. Clearly, in program issues that relate directly

to budgeting, they will not. Hopefully, in matters of academic program assessment, there will be enough credibility in the joint board/institutional evaluation to convince these staffs not to try to preempt the field.

At this point it is necessary to draw some distinctions between the two major types of statewide boards and the respective strengths and weaknesses they bring to program review. Statewide governing boards clearly have the greater power to undertake reviews of existing academic programs, but practice to date indicates that they have no greater inclination to undertake this sensitive task than have their coordinating agency brothers. If anything, the necessarily heavy involvement of consolidated boards with institutional budgeting results in their having somewhat less freedom to change priorities in the directions that Glenny proposes and that we endorse. Therefore, on problem number one, i.e., statewide board priorities, we find no significant advantages to either board type.

Concerning the second problem, however, this is not so. Here the consolidated governing board is clearly in a better position to "request" institutional cooperation, since the invitation is issued along a governing line of command, with sanctions in reserve if needed. The coordinating agency, in contrast, must hope for institutional compliance but is much less able to enforce it.

The score is somewhat evened when we come to the third problem, for statewide coordinating boards are potentially more credible as "outside evaluators" than consolidated governing boards, which are seen, and usually rightly so, as "advocates" for the institutions they govern. In

a few states where the coordinating boards have allegedly been captured by the institutions they are supposed to coordinate, state officers dismiss their ability to undertake "objective evaluations." But in most other states, coordinating boards can point to their statewide jurisdiction and mandate -- similar to that of the executive and legislative -- to protect the public interest.

D. The State/Institutional Partnership for Quality Program Reviews

Except in those few states where a majority of the institutions already have in place a high quality program review process, we propose that the statewide board should initiate a first cycle of rigorous evaluations of existing academic programs. This cycle would use an inter-institutional committee to advise board staff in the development of guidelines and procedures, and would exploit board abilities to undertake lateral reviews and to employ outside consultants. The criteria would include the quantitative measures reviewed in earlier chapters to serve the audit function, and qualitative indices jointly agreed upon by the board, outside consultants and the inter-institutional committee.

The statewide board would not make immediate operational decisions or recommendations based on this first review, but rather would refer its findings to the institutions in question with requests that institutional responses be made in the broader and more coherent context of the next planning cycle -- preferably every four years. Institutional faculty would be involved through participation on the inter-institutional committee, through working with the outside evaluation team, and through developing proper institutional responses to the findings.

Maximum use would be made of incentives, whereby institutions would be able to retain whatever funds were saved through program terminations in order either to enrich other existing programs or to commence limited new programs. Other system rewards could be pegged to the planning cycle, so that institutions would have positive reasons to respond cooperatively. For example, statewide boards could seek a discretionary state fund for experimental or innovative institutional projects, and one of the qualifying criteria could be previous cooperation in the elimination of existing programs. On the other hand, if an institution can offer convincing evidence in the next planning cycle that an existing program previously judged weak will receive the necessary institutional support, then, absent over-riding statewide concerns, the statewide board should defer to institutional priorities.

The inter-institutional committee should monitor the fairness of the first cycle review, and soon thereafter widely disseminate its mode of operations. Institutional self-evaluation procedures should then be created and the role of the statewide board should be altered to the following three functions:

1. It should develop with each institution a joint charge for its evaluators, and reach a concensus on the selection of outside evaluators, if and when they are needed;

2. It should monitor the various institutional self-evaluations; and

3. It should be ready to furnish statewide evaluations should any particular institution's procedures break down.

In order to test the effectiveness of the monitoring process and to renew

its credibility with state government officials, the board perhaps ought to select an academic program or two each evaluation cycle to see whether a rigorous state-level review produces roughly the same findings as the institutional self-evaluation.

E. On-Going Process of Review

Following the first complete round of audits and subsequent in-depth reviews of those programs found wanting, a system of on-going program monitoring should be put in place. Many states have developed information systems which can be adapted for this purpose.[53] Also, the National Center for Higher Education Management Systems (NCHEMS) has developed a State-Level Information Base (SLIB) which can be adapted for this purpose. Such a monitoring system might have as its first phase a "triggering mechanism" that would be based on program information regarding the four major groupings of criteria (i.e., productivity, quality, cost and unnecessary duplication).[54] Phase two would be a much more elaborate evaluation of each of the four criteria indicated above. Phases three and four primarily assure "due process." Below we briefly outline how such an on-going monitoring system might work. Figure 4 shows a diagram of such a system.

1. Phase One -- Under the proposed process, all existing academic programs would be subject to constant review based on an information system which feeds data on the four basic criteria (i.e., duplication, cost, quality and productivity). Alternatively, the timing of the review cycles could vary; they could be done annually or every 3-4 years to coincide with the statewide long-range planning periods. The cost of the review process would have to be balanced against the benefits

obtained from a given frequency. The information would be reviewed systematically as part of a comprehensive information system.

a. Duplication. The criteria used here would need to demonstrate whether a particular program "unnecessarily" duplicates another program. If so, the program would automatically be subject to a more extensive review, which would have to include whatever other programs it allegedly duplicates. A problem would arise, of course, if the other duplicative programs are not within the purview of the board (i.e., private sector). An examination of duplication could be based on the system developed by Martorana and Kuhens.

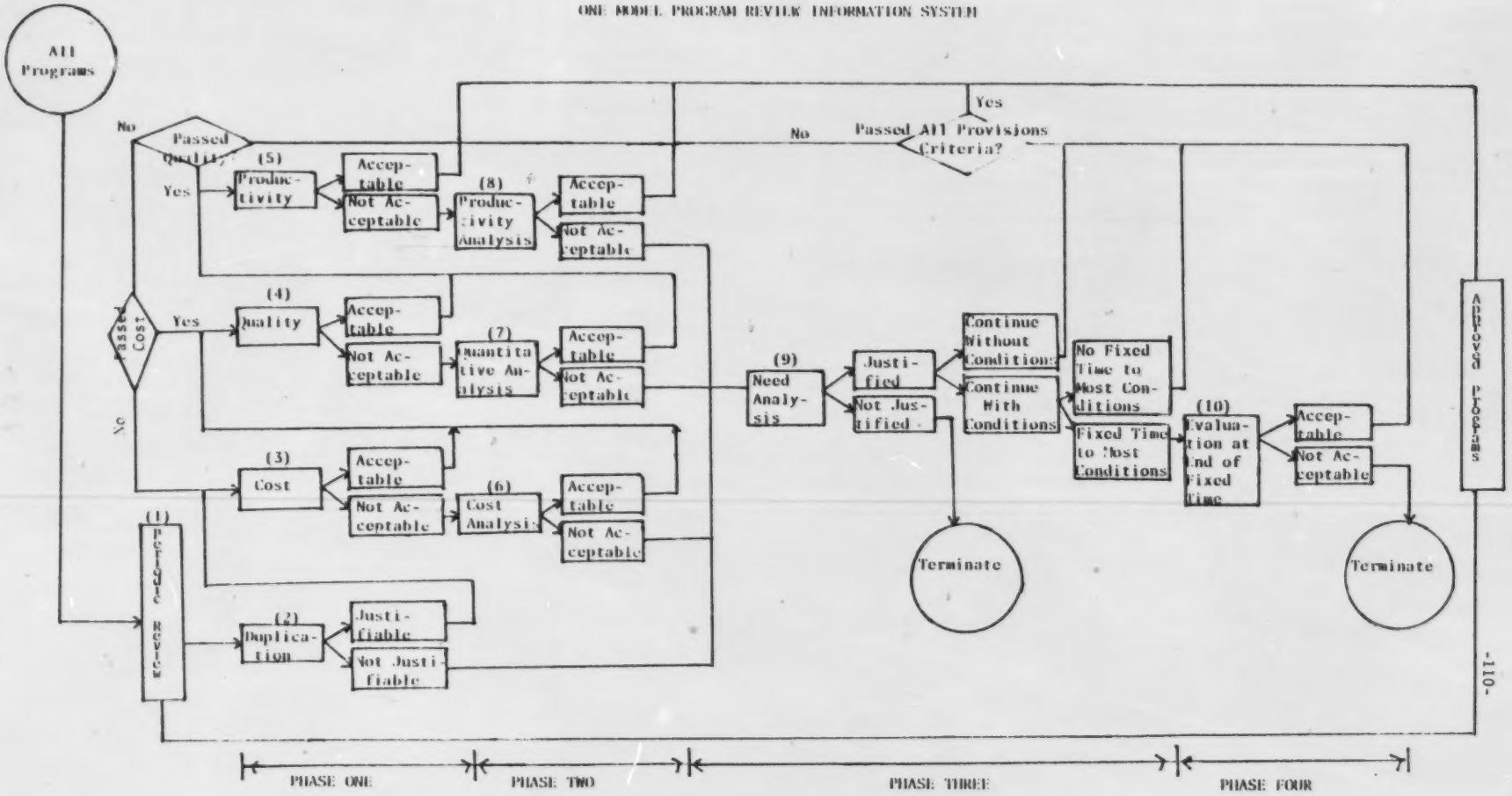
If duplication proved not to be a problem, the program would then be examined on the basis of the second, or cost criteria. If, on the other hand, the programs were duplicative, they would trigger a thorough going "needs analysis."

b. Cost. Each program passing the first criteria would next be reviewed on the basis of cost. The cost criteria could be established as an estimate of maximum costs per program correlated with the level of programs (i.e., associate, bachelors, masters, doctoral), with years (i.e., freshman, sophomore, junior, senior), with discipline or groups of disciplines, and other relevant factors. Programs exceeding the estimated maximum cost would trigger a more extensive review to determine if the costs were unreasonable when other factors were taken into consideration (e.g., extremely high quality programs, relation to other programs and services, etc.).

c. Quality. Quality will probably be the most difficult to

FIGURE 4

ONE MODEL PROGRAM REVIEW INFORMATION SYSTEM



assess and its evaluation may just consist of negative criteria. For example, the following might constitute the criteria against which the programs are examined: (1) an unfavorable accreditation report; (2) follow-up studies which indicate an unusually high failure rate for graduates to pass qualifying exams or obtain future relevant placements; (3) low professional standing on the basis of national rankings or the determination of outside consultants.

A system for assessing the dimensions of quality could also be based on program profiles such as those developed by Clark, Hartnett and Baird;[55] or the check-list in Frederick E. Balderston.[56]

If a given program is identified as possibly being low in quality, it would then be subject to a more extensive qualitative analysis.

d. Productivity. Minimal standards of productivity could be stated as an average of so many graduates, at the different degree levels, over a given period of time (e.g., 3-5 years). Programs falling below the established minimums would trigger a more extensive review of productivity, those which are above the minimum would be subject to no further review during this review period.

2. Phase Two -- The second phase of the review process would be a more extensive review of the programs identified as troubled in Phase One. The purpose of this phase would be to insure that the program is indeed a wanting criteria. It is included to prevent an arbitrary and rigid application of a single criteria.

a. Cost Analysis. It is possible that an excessively high

cost may be justified on the basis of other unspecified criteria, which would have to be justified as acceptable alternatives. The burden of justification would be on the institution or institutional unit (i.e., department, college, division). It may also be possible that a cost-benefit analysis might be the most appropriate cost criteria for a given program. If on the basis of the Phase Two review the program costs cannot be justified the program would be submitted to a need analysis.

b. Qualitative Analysis. Programs identified as being possibly of low quality would be subject to an extensive qualitative analysis. Such an analysis would be conducted by other faculty and appropriate administrative personnel at the institution in question and/or by appropriate outside consultants. The review might include a thorough going review of faculty qualification and activities, and of the curriculum. Programs failing this review would also be subject to a need analysis.

c. Productivity Analysis. Like the other Phase Two analyses this one would seek to justify (if possible) the productivity of a given program which did not meet the minimum standards adopted in Phase One. The low productivity might, for example, be justified for a given program because it is a necessary component of another, high productivity program. At any rate, programs unable to justify their low productivity would be subject to an extensive need analysis.

3. Phase Three --

a. Need Analysis. This phase, a thorough examination of the need for the program, is crucial in the program review process. Through

need analysis programs of questionable cost, quality or productivity are either justified for continuance on the basis of "other redeeming value" or they are terminated (or recommended for termination). It could be that the program in question fulfills the institutional mission, or supplies state, regional or local manpower needs, or answers to student demand or political necessity.

The programs that are justified would likely fall into two categories: (1) justified to continue without conditions, and (2) justified to continue with conditions. According to the program's particular shortcoming, its status would be conditional on its improving its quality, its productivity, or its costliness. Likely, these improvements would have to be made within a specified time.

4. Phase Four -- This last step in our hypothetical process of program review would be the phase in which programs' compliance with the conditions, timetables and other evaluative factors set for them would be examined. Those programs failing to comply would be terminated or recommended for termination. The next step in the review cycle is to return to Phase One.

FOOTNOTES

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